The OA Hip and Knee Service: Improving the outpatient experience for joint replacement referrals

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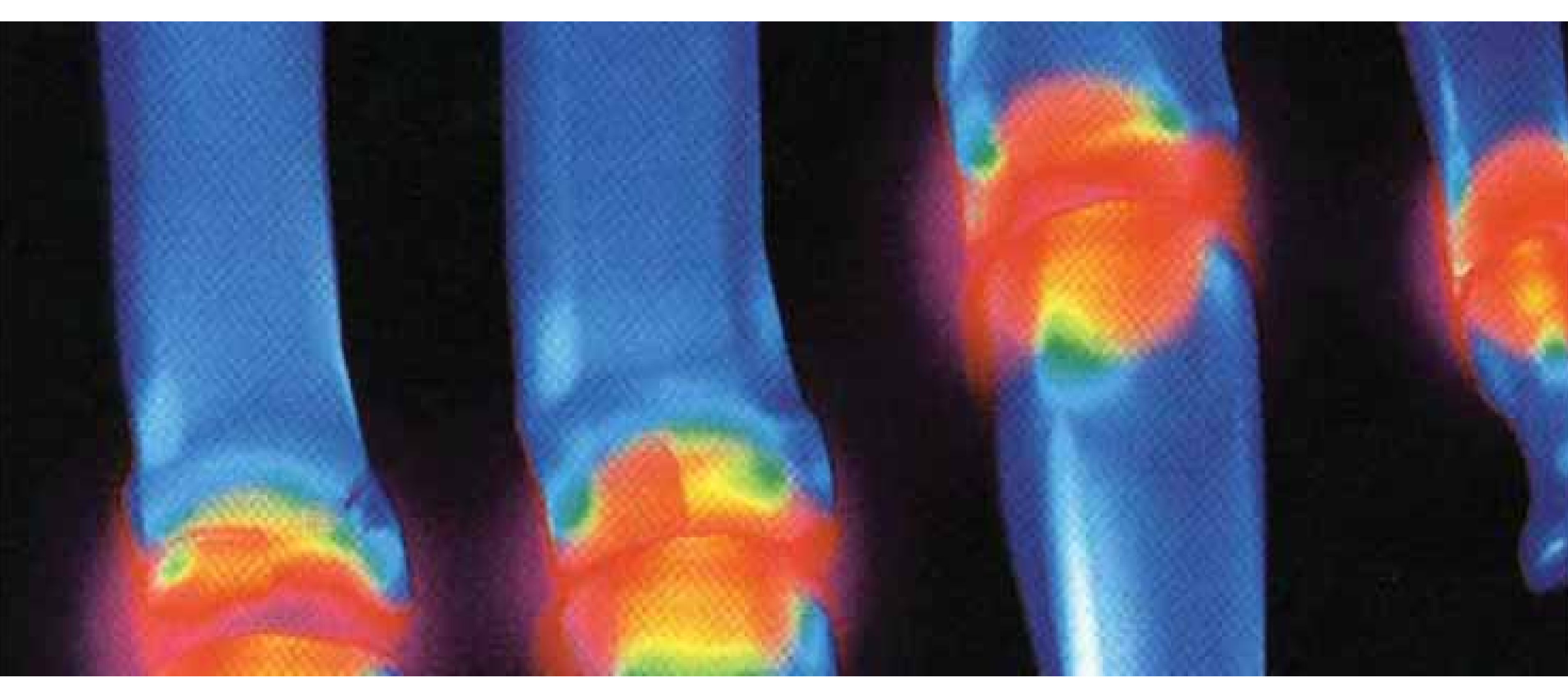
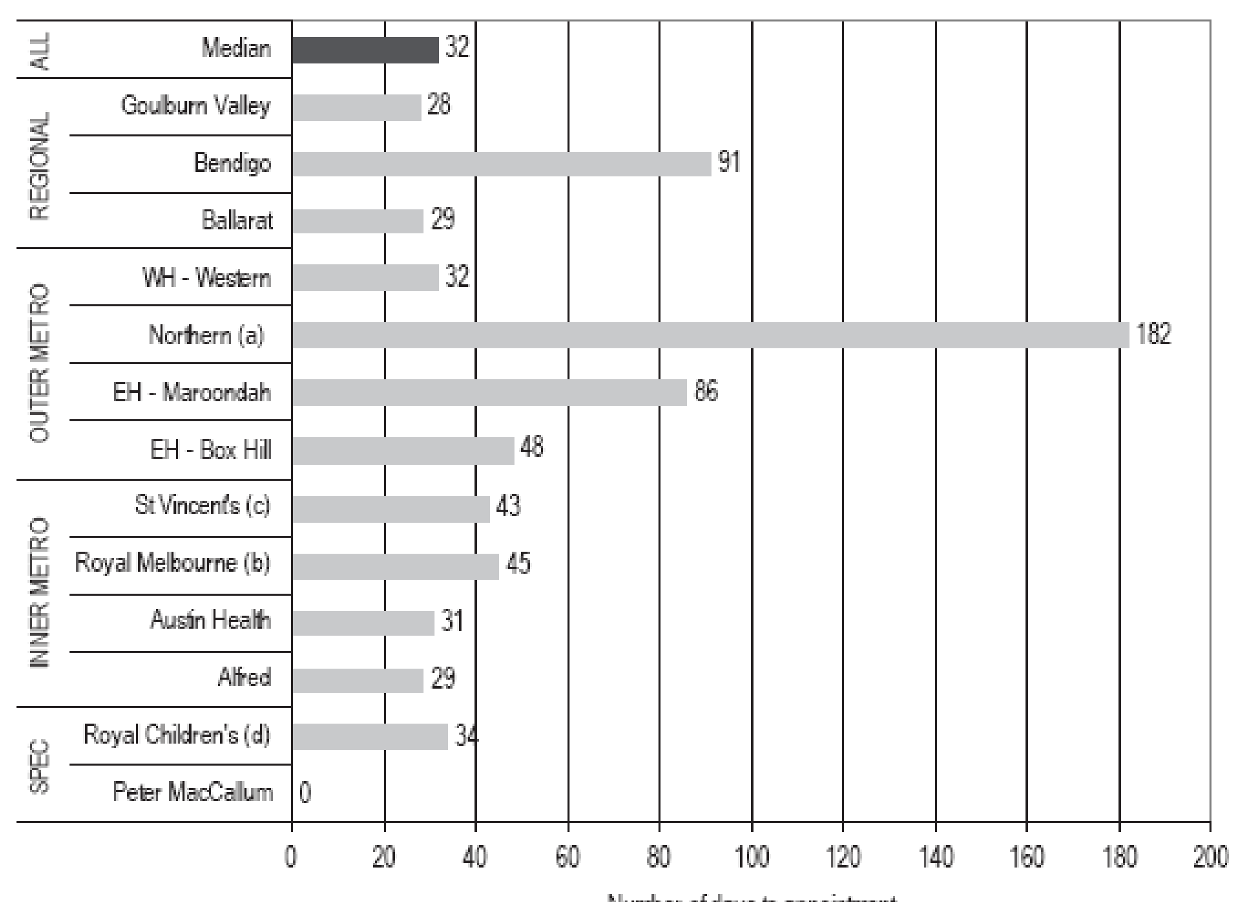
Department of Human Services

Background



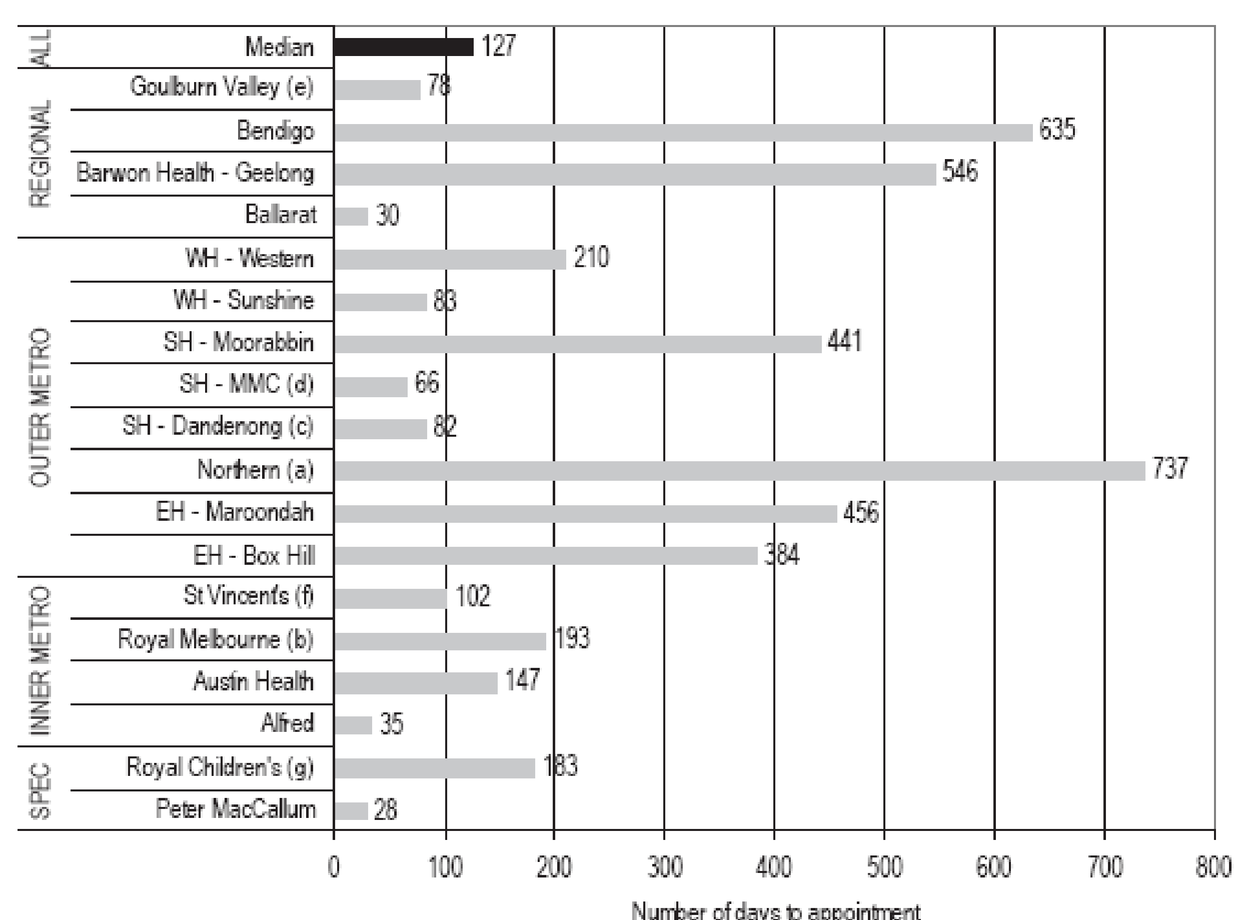
When would the next available orthopaedic appointment be for patients who were assessed as being "semi-urgent"?



Source: Victorian Auditor General's Office.

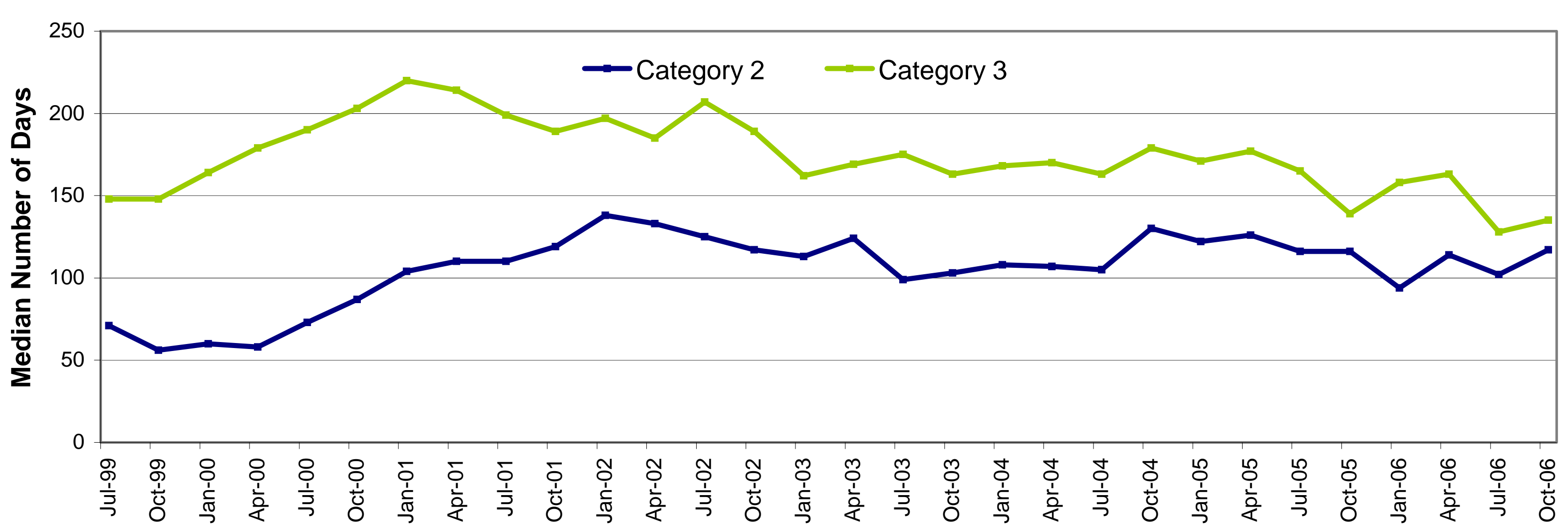
When would the next available orthopaedic appointment be for patients who were assessed as being “non-urgent?

FIGURE C6: INDICATIVE NUMBER OF DAYS TO THE NEXT ORTHOPAEDICS APPOINTMENT FOR NEW PATIENTS WHO ARE *“NON-URGENT”*?



Source: Victorian Auditor General's Office.

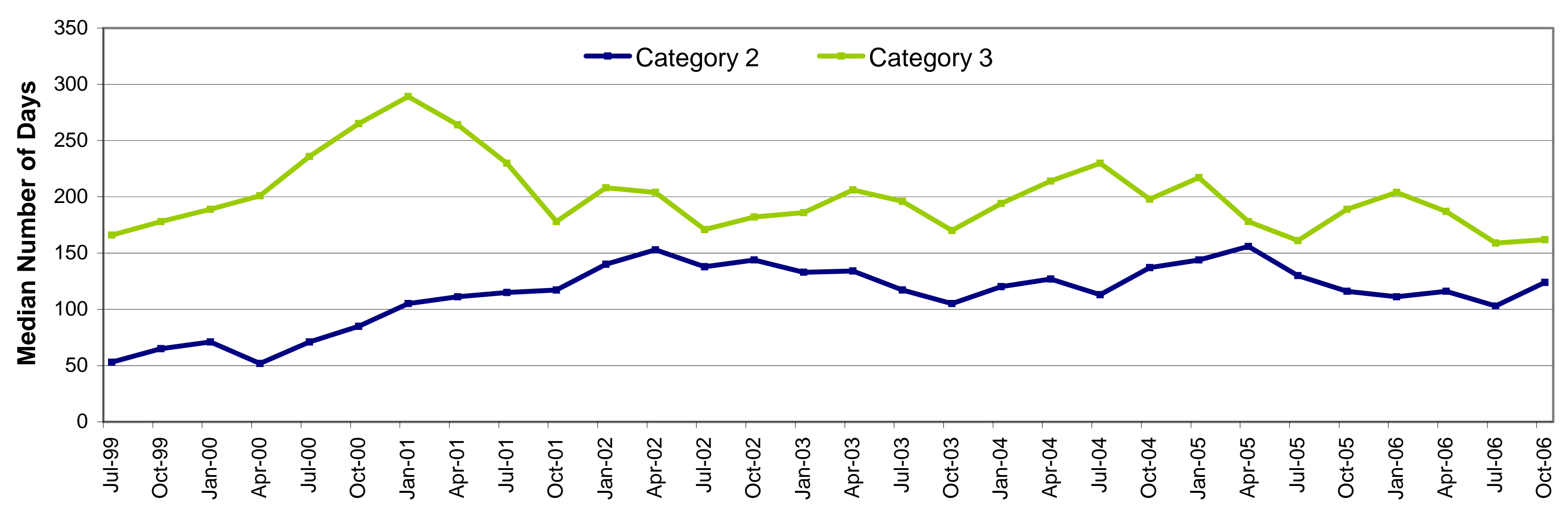
Median waiting time for hip replacement surgery



Source: Elective Surgery Information System (ESIS), Department of Human Services.

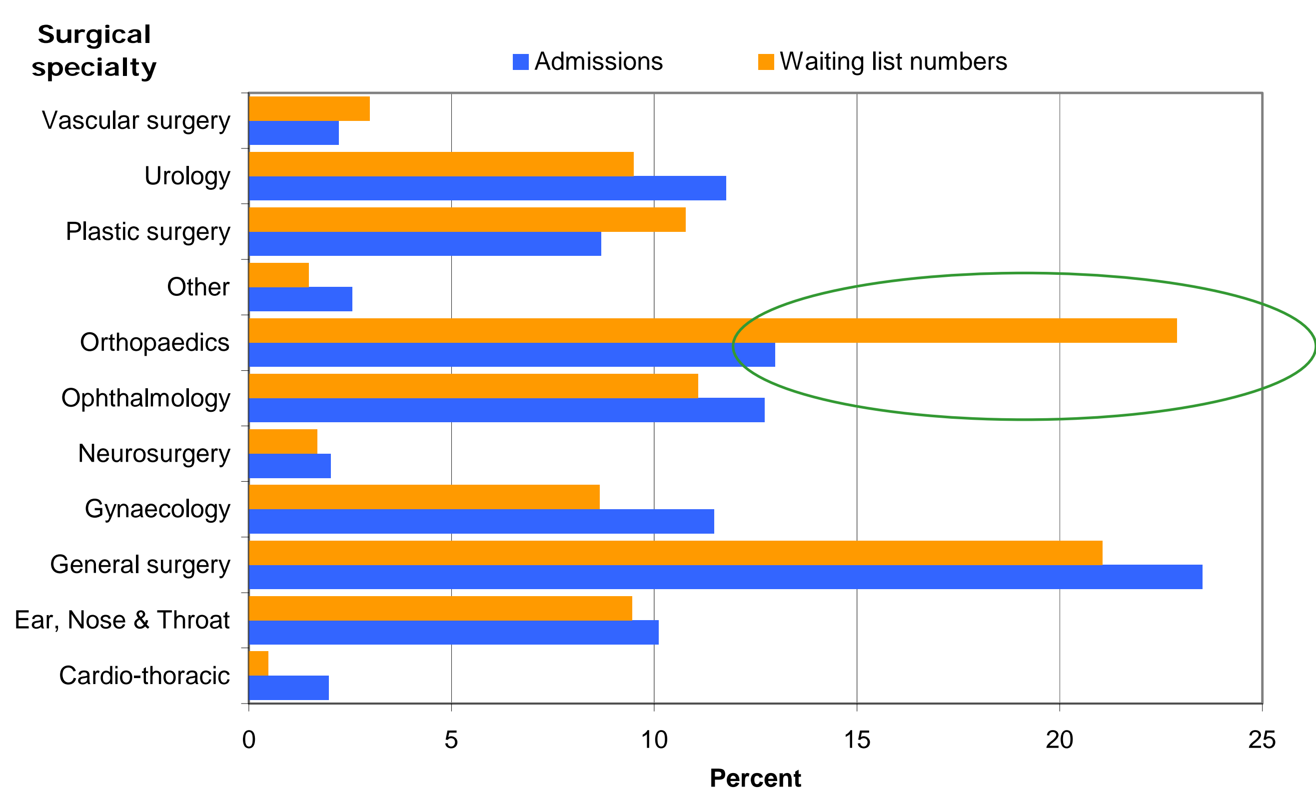
Note: The median is a type of average that is found by arranging the values in order and then selecting the one in the middle. The median is used in cases where the distribution has extreme values that cause the mean to be unrepresentative of the distribution of values.

Median waiting time for knee replacement surgery



Source: Elective Surgery Information System (ESIS), Department of Human Services.

Percent of elective surgery admissions and waiting list numbers, by specialty



Source: Elective Surgery Information System, Department of Human Services, 2005-

Note: The comparison is based on admissions for 2005-06 and waiting list numbers at December 2006.

In Victoria, the mismatch between activity and unmet demand is greatest for orthopaedics

X_4% OF PATIENTS ARE NOT FIT FOR SURGERY AND NO STEPS ARE BEING TAKEN TO GET THEM FIT

X_5% OF PATIENTS DISCHARGES ARE DELAYED

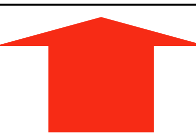
Patients with musculoskeletal conditions

Patients discharged after joint replacement surgery

Patients admitted for hip/knee replacement surgery

Patients referred to outpatient clinics

Patients waiting for orthopaedic outpatient clinic appointments



Patients waiting for hip/knee replacement surgery

X_1% OF NEW PATIENT REFERRALS DO NOT NEED A SURGICAL OPINION

X_2% OF NEW REFERRAL PATIENTS DO NOT ATTEND THE OUTPATIENT CLINIC

X_3% OF PATIENTS DON'T WANT OR NEED SURGERY (YET)

Problems in search of solutions

- ✓ X_1, X_2, X_3 … X_5 are all unknowns!
- ✓ Patients may not have realistic expectations;
- ✓ There are often many separate queues, or waiting lists;
- ✓ Every patient is assessed by an orthopaedic surgeon (the scarcest resource);
- ✓ The surgeon may not be the right clinician to see;
- ✓ cycles of premature / inappropriate referrals occur

Problems in search of solutions (continued)

- ✓ Patients tend to be treated in chronological order, not in order of clinical need;
- ✓ There is little or no contact with patients waiting for surgery prior to their pre-operative assessment;
- ✓ Management while waiting is limited and generally uncoordinated;
- ✓ Waiting times for waiting and admitted patients are long

Waiting …

Orthopaedic Assessment → Surgery

WAITING………

- Culture amongst GPs of referring before surgery required
- Poor quality referrals
- Limited triage / prioritisation system
- Lack of conservative management
- Lack of monitoring

WAITING………

- Limited prioritisation system
- Lack of conservative management
- Lack of monitoring

work on increased capacity and demand management

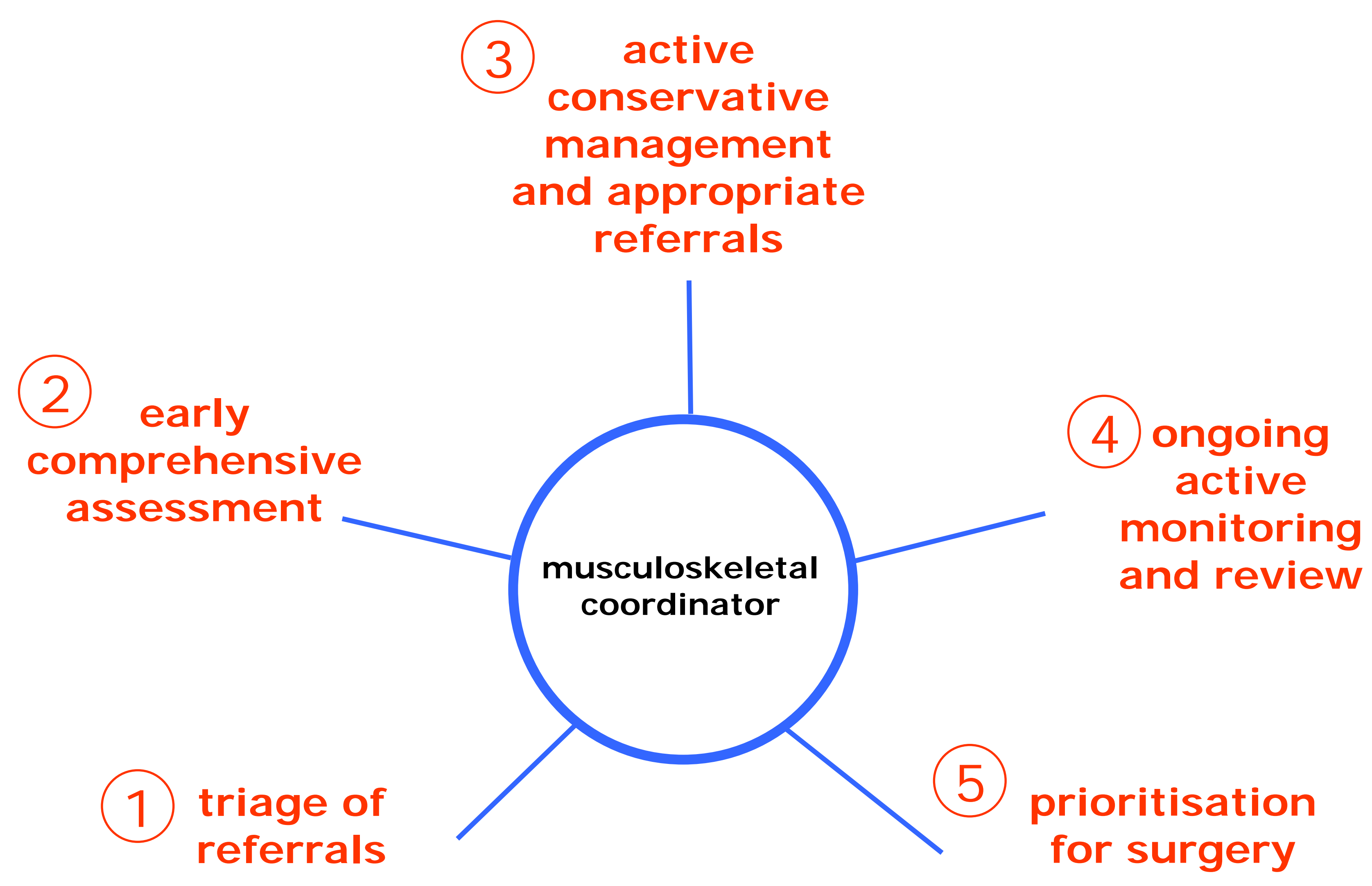
Canada is highly resistant to spending health care dollars on anything other than direct services — be it administration or information systems or analysis. Decision–makers, pressured by claims unsupported by reliable information, perceive little choice but to apply grease to the squeakiest wheels and generalize from that (often anecdotal) basis. Thus, public policy is hostage to its own failure to invest in the fundamental infrastructure for intelligence–gathering.

Lewis et al, 2000, p. 1297

Orthopaedic Waiting List (OWL)

- Evidence-based triage
- Early comprehensive assessment
- Active conservative management and appropriate referral
- Ongoing active monitoring and review
- Prioritisation for surgery
- Workforce redesign

The musculoskeletal coordinator



Role of musculoskeletal coordinator

Assess and monitor:

- Those in the outpatients clinic and those who are waiting for surgery.

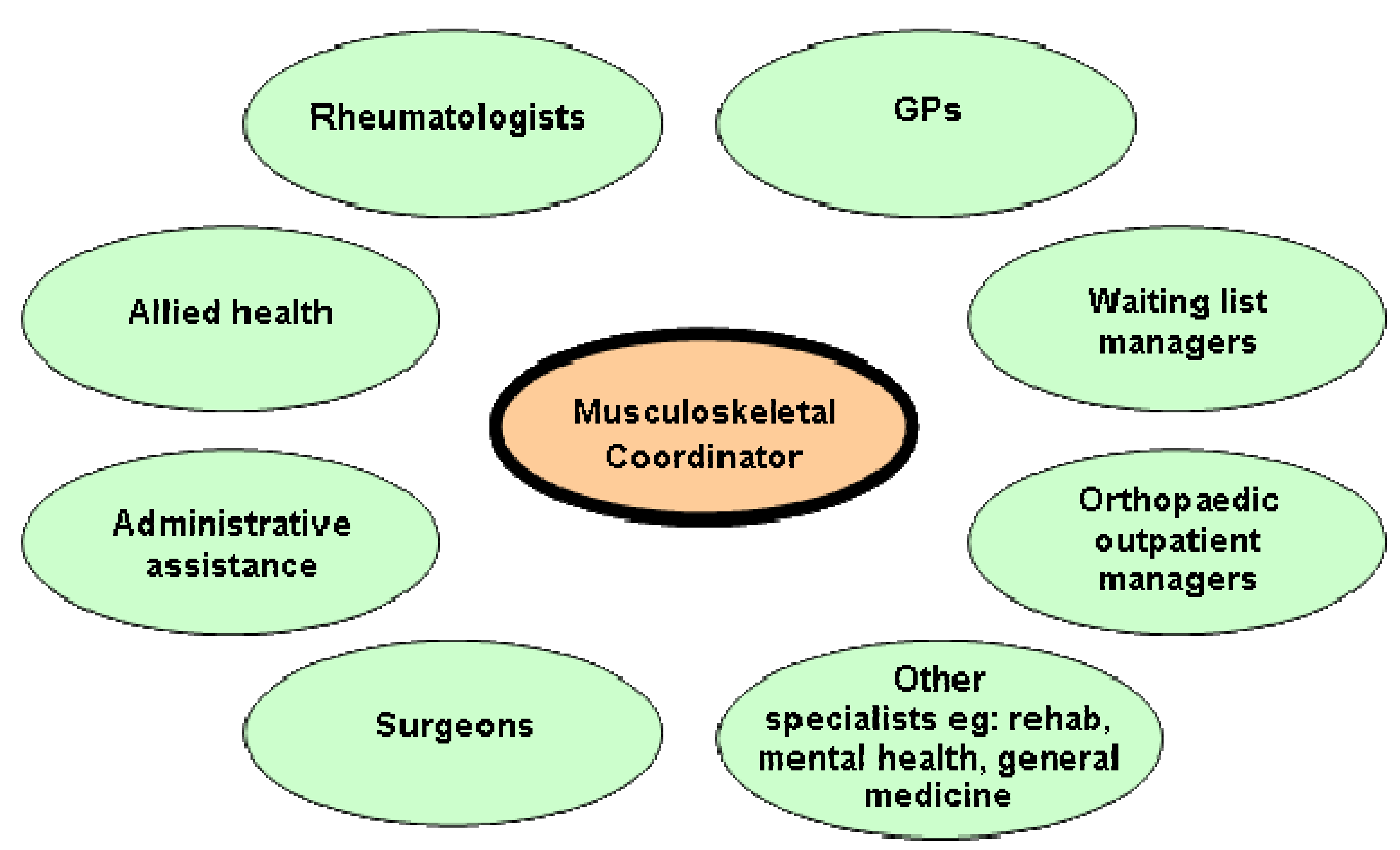
Activities:

- Coordinate administration of the MAPT system
- Obtain information to support conservative management
- Conduct physical assessment of patients
- Refer patients to other services
- Liaise with orthopaedic surgeon, general practitioner and other service providers.

Options for MSC role trialled by pilot sites

Option 1.	Option 2.	Option 3.
Grade 2 physiotherapist	Physio or nurse with additional training **OR** nurse and physio working together	Nurse practitioner **OR** extended scope physio **OR** Option 2 plus GP or rheumatologist
Competencies • Assessment of OA • Referral to OA services • Home exercises • Education re OA and JRS • Monitoring of OA • Resource for GPs • Resource for patients	Competencies • Assessment of OA • Referral to OA services • Home exercises • Education re OA and JRS • Monitoring of OA • Resource for GPs • Resource for patients • Assessment of co-morbidities	Competencies • Assessment of OA • Referral to OA services • Home exercises • Education re OA and JRS • Monitoring of OA • Resource for GPs • Resource for patients • Assessment of co-morbidities • Ordering and interpretation of diagnostic tests • Pharmacological pain management

A multidisciplinary approach



Anticipated benefits of triage of referrals

- Segmentation of orthopaedic referrals to allow early identification of osteoarthritis patients requiring hip or knee replacement surgery
- Implementing a clinical pathway to assessment
- Patients given an appointment with the most appropriate discipline for diagnosis and/or treatment
- Fast tracking of patients with high MAPT scores to orthopaedic outpatient clinic for assessment
- Patients with low MAPT scores given early comprehensive assessment

Anticipated benefits of early comprehensive assessment

- Patients contribute self-rated health assessments based on Osteoarthritis Hip and Knee Questionnaire;
- Fewer delays / improved communication / less duplication between health care professionals once in the system;
- More consistent access to diagnostic investigations, conservative management options and other clinics;
- More conservative treatment options tried first;
- Higher conversion rates for OA patients seen by consultant surgeons.

Anticipated benefits of active conservative management and appropriate referrals

- Patient (and carer) involvement in developing care pathways;
- Services tailored around the (often complex) needs of patients;
- Greater focus on self–management and prevention;
- Improved communication leading to more realistic patient expectations;
- Improved interface with other primary care services (including podiatry, orthotics, occupational therapy, dietetics, physiotherapy);
- Patients assisted to keep fit for surgery.

Anticipated benefits of ongoing monitoring and review

- Defined care pathway for patients for whom elective surgery is considered the best option;
- Patients monitored at regular intervals (3- or 6-monthly) for any deterioration in their condition (repeated MAPT scores);
- Triage of patients based on changes in MAPT scores (fast-track clinical assessment and commitment to treatment in the event of deterioration);
- Potential for removal from orthopaedic surgery waiting list if patient's condition remains unchanged after a series of repeated assessments.

Anticipated benefits of prioritisation for surgery

- Osteoarthritis Hip and Knee Questionnaire completed by patients;
- Patients MAPT scores based on a scoring algorithm;
- MAPT score algorithm is a linear model;
- Assessment of the burden of waiting for joint replacement surgery;
- Schedule patients with high MAPT scores for surgery sooner and those with lower MAPT scores later

Osteoarthritis Hip and Knee Questionnaire MAPT Score

- Attribution to hip / knee

  For the following questions, think about how your hip or knee has been affecting you over the last 3 months when taking your usual medication or using your usual aids (e.g., walking stick, frame or handrails).

- Short

  11 questions

  5 dimensions (pain, economic impact, psychosocial impact, recent deterioration)

- Inclusive

  Elicits patient's perspective but is "verifiable" by clinical interview

Dimensions of the Osteoarthritis Hip and Knee Questionnaire

PAIN

Sleep disturbance

Pain at rest

Pain related to movement

LIMITATIONS TO DAILY ACTIVITY

Impaired mobility

Ability to undertake self-care activities

Level of domestic support

Carer roles

ECONOMIC IMPACT

Interference with ability to work

Financial provider for others

PSYCHOSOCIAL IMPACT

Psychological effect of disability

Social effect of disability

RECENT DETERIORATION

Let's try before we buy
(but with the expectation of improvement)

4 pilots selected via expression of interest process to implement MAPT system over a 12-month period

- 6 months preparation and planning
- 6 months implementation

Process and impact evaluation undertaken by consultants

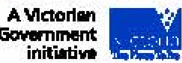
Objectives of the evaluation of the pilot site implementation:

- refine the OA Hip and Knee Service Model of service delivery based on the input and experiences of the pilot sites;
- identify factors likely to influence the wider implementation and sustainability of the service delivery model; and
- make recommendations about the ongoing development of the resources provided to sites implementing the MAPT system.

Patient and GP brochures provided to the pilot sites

Osteoarthritis (OA) Hip and Knee Service

Information for patients



Osteoarthritis (OA) Hip and Knee Service

Information for general practitioners

The Osteoarthritis (OA) Hip and Knee Service

The OA Hip and Knee Service is now available at a number of public hospitals in Victoria. This new service better coordinates the management of patients with hip or knee OA and helps prioritise patients on outpatient and elective surgery waiting lists. The service includes the use of the Hip and Knee Questionnaire and a new service model and is provided free of charge.

Features of the OA Hip and Knee Service

- Early and comprehensive assessment
- Multidisciplinary team engagement
- Conservative management
- Monitoring, review and reporting
- Equitable and appropriate prioritisation for surgery

The Hip and Knee Questionnaire

The Hip and Knee Questionnaire is a validated tool consisting of eleven questions, taking 5–10 minutes to complete. It is available in a number of languages and collects information about:

- severity of pain
- enjoyment of life
- ability to self care and care for others
- ability to undertake paid employment
- variations in the severity of disease over time.

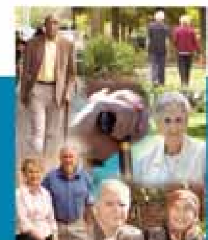
A score will be calculated based on the answers given in the questionnaire. That score is then used in conjunction with clinical assessment to prioritise access to outpatient and surgical waiting lists. Patients may request your help to complete the questionnaire. It can then be reused at regular intervals to identify clinically and socially relevant changes in disease burden and the need for reprioritisation.

How will the OA Hip and Knee Service help my patients?

The OA Hip and Knee Service will help patients self manage their OA by developing and coordinating a management plan that best suits their needs. The service provides information and guidance on the best way to manage OA, and can assist in detecting deterioration in health to ensure timely access to surgery when it is needed.

How will the OA Hip and Knee Service help me as a general practitioner?

The OA Hip and Knee Service is committed to working collaboratively with patients and their general practitioners to achieve best possible outcomes in the management of OA. The findings of any assessment and proposed treatment plan will be forwarded for your information or feedback. The service will advise of any significant variation from the proposed treatment plan.



For further information about the Osteoarthritis Hip and Knee Service call:

1300 781 821

or visit our website at:

www.oaservice.org.au

Materials developed by the ARV Centre for Rheumatic Diseases for the OA Hip and Knee Service, supported by funding from the Statewide Elective Surgery Program, Department of Human Services, Victoria

Dimensions that varied across the pilot sites

- Location (inner /outer suburban & rural);
- Capacity
- Level of engagement with community health
- Level of engagement with general practitioners
- IT systems
- Extent of experience with similar services; Current programs for improvement of outpatient services

PROCESS EVALUATION
OF PILOT SITES

- What are the enablers of, and barriers to, successful implementation of the MAPT system?
- What refinements of principles and processes are required before statewide rollout can occur?

General service implementation and management of change

Barriers	Enablers
Short planning timeframe for sites	Experience with similar services
Limited skills in terms of change and project management amongst clinical staff	Current programs for improvement of outpatient services in general
Lack of formal stakeholder engagement	Regular opportunities for formal stakeholder engagement
Poor data collection systems within the hospital and poor skills in terms of data analysis and interpretation	Engagement with community health
	Coordinating team support
Limited IT systems	Well developed IT systems and IT support

Workforce redesign and multidisciplinary approach

Barriers	Enablers
Lack of definition of workforce roles; lack of funding incentives for workforce redesign	Acceptance of evolution of roles to meet needs and climate; Good communication/collaboration between members of the multidisciplinary team;
Lack of access to medical (as opposed to surgical) input	Co-location with orthopaedic or rheumatology clinics; access to medical input fosters confidence of stakeholders (surgeons)
GP reluctance to support deferral from surgical assessment given very long waiting times for surgical outpatients	Existence of nurse liaison role to facilitate communication with patients, GPs and surgeons; shared role of MSC (nurse/physiotherapist) supporting service continuity; awareness and understanding of service objectives amongst community health providers
Lack of role variety for MSC position for an advanced physiotherapist	
Lack of *active* support from surgeons	Strong clinical leadership
Inadequate capacity of OA Hip and Knee Service; difficulty in recruiting suitably qualified staff	Engagement with community health
Inadequate resources including administrative support (to enable MSC to fulfil intended clinical role) and facilities	

Effective triage

Barriers	Enablers
Lack of triage protocols and lack of procedures for referral followup; lack of consistency of triage practices between MSC and registrars	Established triage procedures for other orthopaedic clinics (single point triage system); defined protocols for triage to OA Hip and Knee Service; involvement of surgeons in developing protocols; accessibility to surgeon input for triage decisions as required
	Previous experience with similar service models
Poor referral quality (including inappropriate referral to OA Hip and Knee Service); limited uptake of standard referral forms by GPs; too many 'standard' referral forms (GPs); lack of minimum standards for referrals (referral guidelines) and lack of enforcement of basic requirements;	Feedback to referring doctors regarding referral quality
Lack of evidence of the utility of the MAPT as a tool to inform triage	

Early comprehensive assessment

Barriers	Enablers
Lack of access to medical input	Prompt access to medical input via rheumatologist
	Prompt access to surgical input from orthopaedic surgeon
Inadequate capacity of OA Hip and Knee Service; difficulty in recruiting suitably qualified staff; lack of facilities and equipment	Co-location of OA Hip and Knee Service with orthopaedic or rheumatology clinics
Lack of defined clinical protocols	Agreed protocols for stages of assessment
	Strong clinical leadership
	Good communication/collaboration between members of the multidisciplinary team

Conservative Management and Referral / Ongoing Monitoring

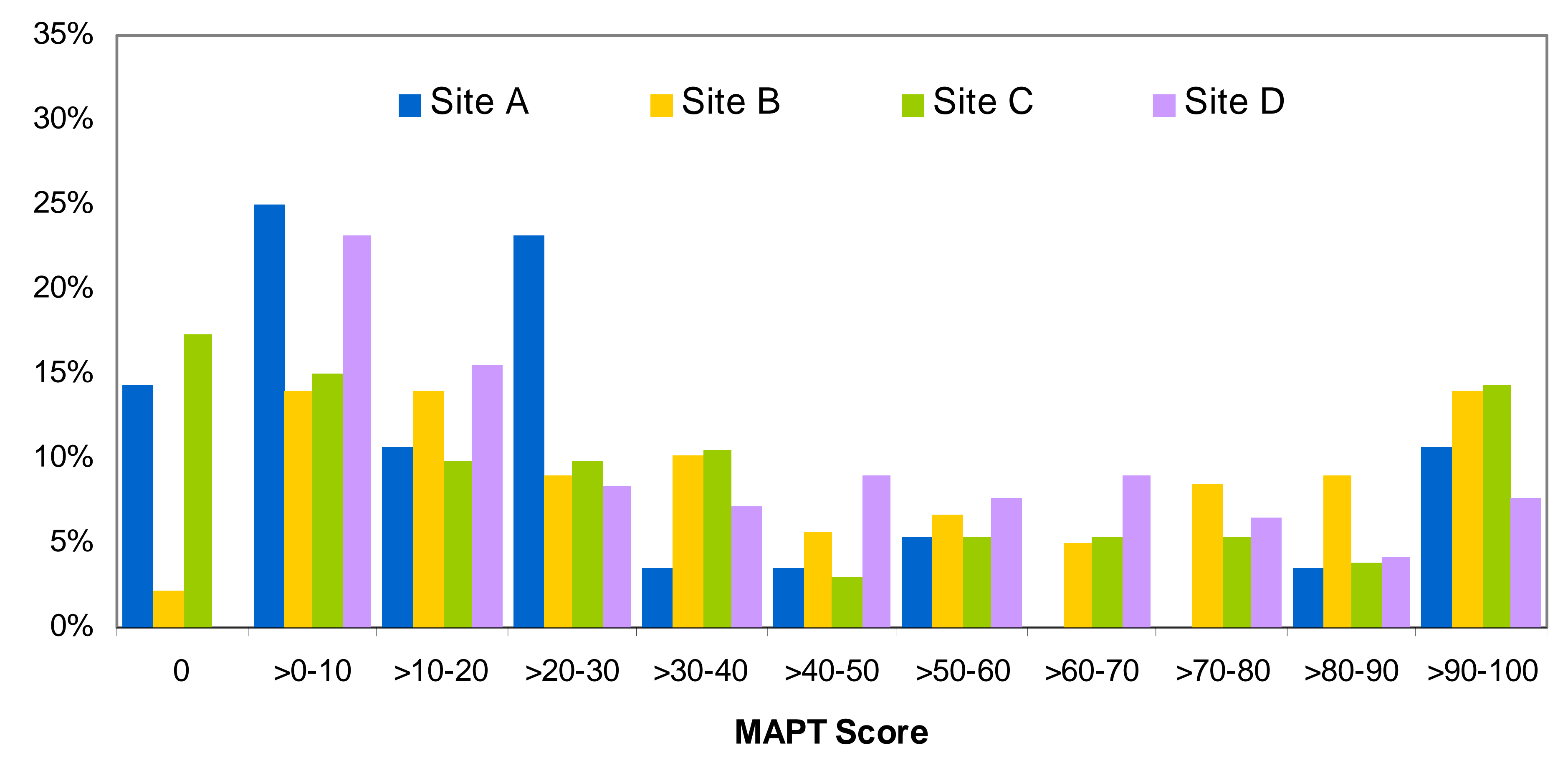
Barriers	Enablers
Lack of involvement of community health on the project Advisory Group	Previous engagement with community health
Inadequate mapping of allied health services available in local community (public and private); GPs don't know how or where to refer	
Inadequate capacity of allied health services - creation of additional waiting lists	
Access to interpreters	
Access to services in rural areas	
Lack of followup by OA hip and Knee service of uptake of referrals; lack of feedback from community providers with respect to uptake of services or completion of course of treatment	Good communication with community health; processes for supporting transfer between health care sectors (e.g., telephone monitoring); high quality letters to general practitioners
Lack of resources for telephone follow-up (and specifically in relation to non-English speaking patients)	Resources for telephone followup
Incorrect completion of the Hip and Knee Questionnaire by patients / gaming	Patient satisfaction with early assessment and conservative management (doing something for themselves)
Patients get sick of filling in questionnaires - poor return rate for repeat mailouts	
Lack of protocols and criteria for judging significant deterioration; general variability of disease	Protocols for review and ongoing care responsibilities based on clinically meaningful score changes
Lack of medical input into clinics may mean have implications for safety (e.g. failure to recognise/manage medication risks)	
Lack of uptake of EPC items by GPs	

Prioritisation of the OWL for Surgery*

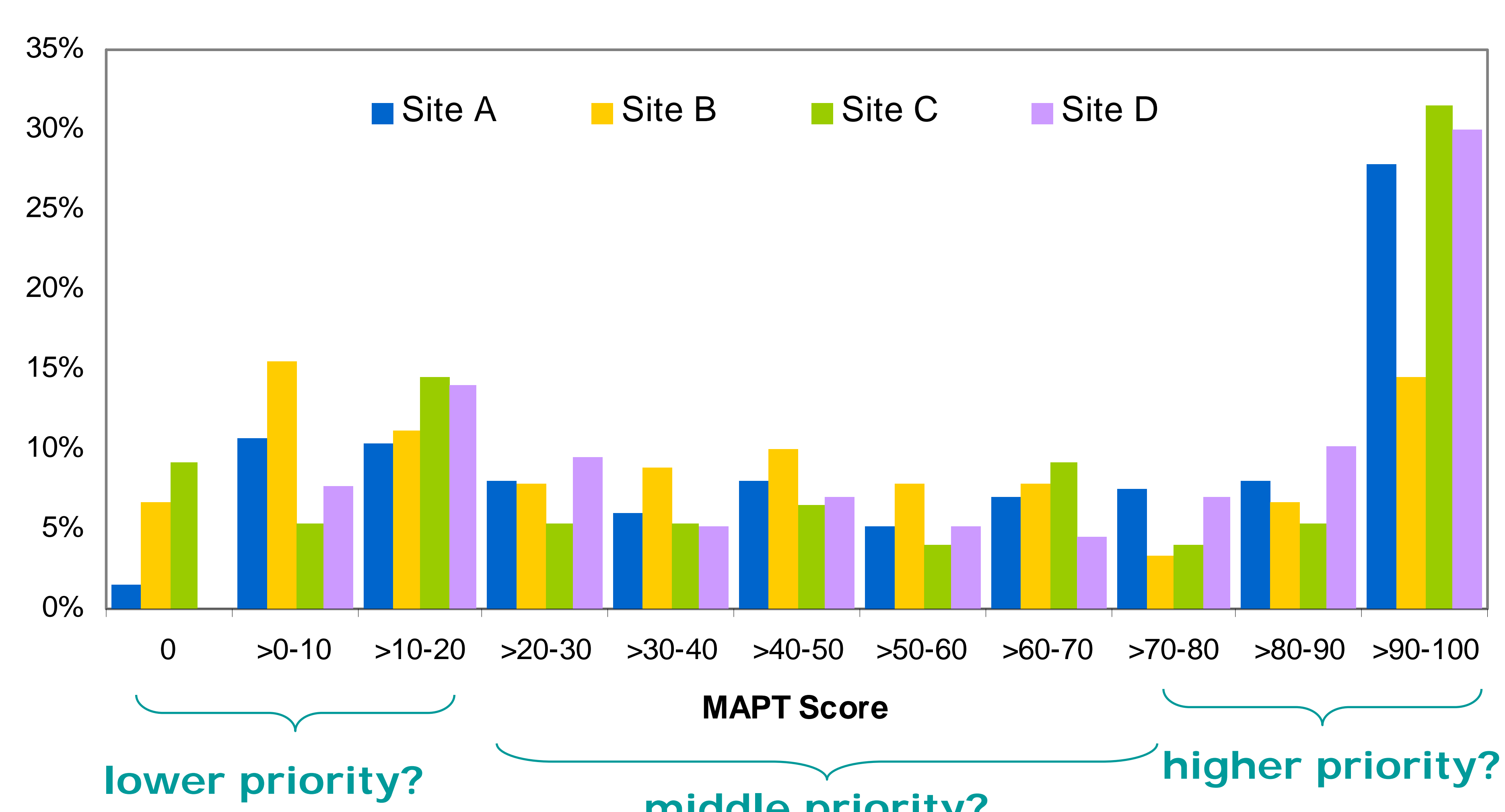
* Based on advice from pilot sites, not yet implemented.

Barriers	Enablers
Delay in introducing the MAPT score concept to surgeons	
MAPT scores were not made available at orthopaedic outpatient consultations to support decision making about placement on the surgical waiting list	Anticipation that the system will help promote surgeon engagement in prioritisation decisions
Lack of clinician understanding of the MAPT score and how it is used	Clinician experience with using the Hip and Knee Questionnaire and MAPT score including a procedure by which it can be adjusted based on clinical observations
Observed instances where the MAPT score does not reflect a patient's observed status	
A concern that a new system should be equitable and include time waited.	Commitment to introducing systems for fairer management of the OWL. Regular feedback to surgeons.
Inconsistency with current reporting requirements based on time waited	Integration of MAPT reporting with organisation performance reporting systems
Concern about how non-OA patients might be affected by the prioritisation of OA patients	
Suspicion of tools being imposed on surgeons	
Multiple surgical lists	
General lack of surgical services	
Gaming by patients	
Incorrect completion of the questionnaire by patients	

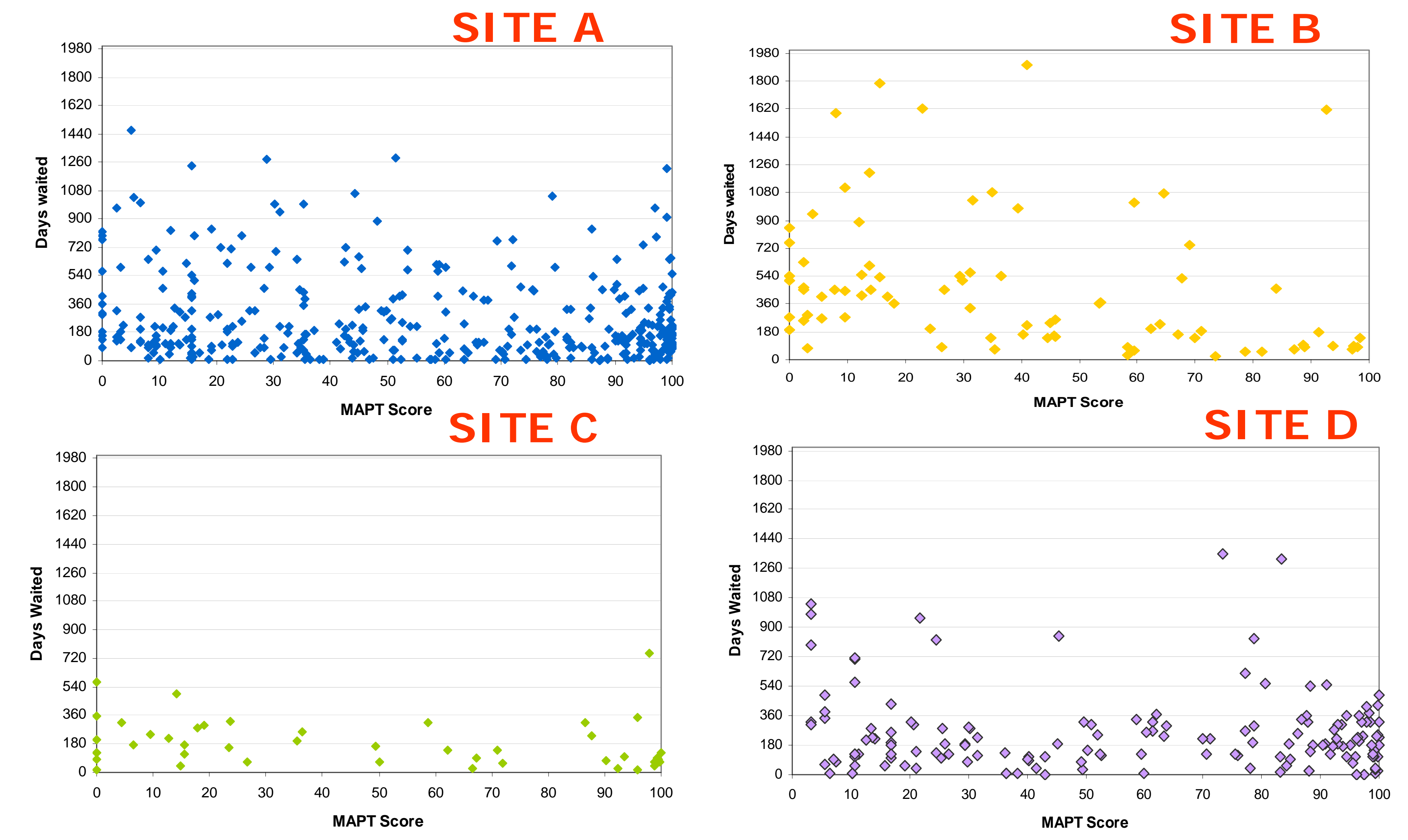
Distribution of MAPT scores for outpatients across pilot sites



Distribution of MAPT scores for orthopaedic waiting list across pilot sites



Relationship between MAPT scores and time waited for OWL patients



Successful implementation of the MAPT system depends on …

- capacity to support and maintain practice change;
- Clinical leadership
- preparation and planning
- transparency of roles and responsibilities
- opportunity to drive improvement based on record keeping and data collection
- extent to which patients are educated about their wait (including the rationale for monitoring and prioritisation)

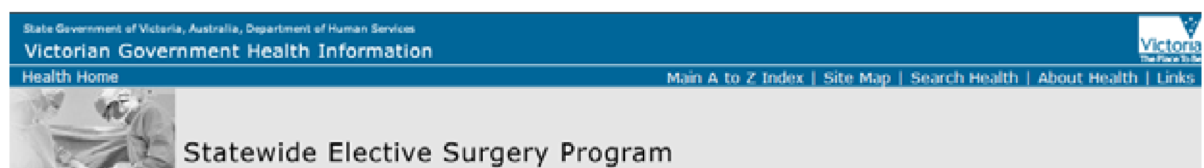
Further Developments Required for Statewide Rollout

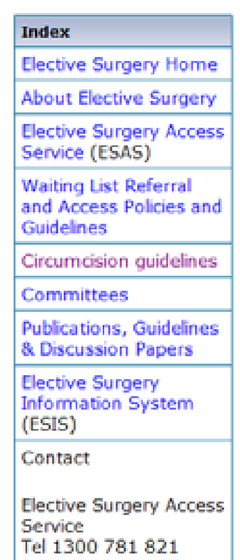
- More explicit definition of the service model along the continuum of care
- Defined clinical protocols amenable to adaptation to local circumstances
- Database redevelopment to support service delivery and drive service improvements
- Training
- Referral guidelines for general practitioners

Sorting out the Spring Racing Carnival may take a little more time but …

publication of the consultants' report on the pilots:

See the elective surgery website at:
http://www.health.vic.gov.au/electivesurgery/





What's New

Victorian Public Hospitals Performance Monitoring Framework Business Rules 2007-08 - August 2007 (PDF File 211KB)

Guidelines for male circumcision in the Victorian public hospital system - August 2007

Elective Surgery Access Policy Review July 2007 (pdf, 627k)

Extended Day Surgery - Guidelines for the implementation and evaluation of 23-hour service models in Victoria (pdf, 620k)

Southern Health Quality Surgical Audit Ophthalmology Unit 2005 - Electronically published November 2006 (pdf, 3083k)

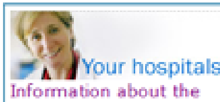
Current Workshops and Conferences

Pre-Admission Workshop Presentations - 5 April 2007

Better State of Hospitals Conference

The Department of Human Services, Access and Metropolitan Performance Branch, hosted a two-day conference on the 27-28 April 2006 to showcase access initiatives. Visit the conference site to read about the conference themes

Presentations from "No Time to Wait" Elective Surgery workshop



Information about the public hospital system and reports on individual hospital performance - includes elective surgery 'time to treatment' information

See also:

Victorian Public Hospitals Performance Monitoring Framework Business Rules 2007-08 - August 2007 (PDF File 211KB)

Hospital Data Systems and Standards (HDSS)