



Referral for Joint Replacement

A management guide for health providers

Final document resulting from consultation

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Developed by The Royal Australian College of General Practitioners (RACGP) Joint Replacement Waiting List Working Group to support best practice in the management of people with joint disease.

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The guide is one of a suite of documents designed to support best practice management of musculoskeletal disease in primary care.

Related documents include clinical guidelines for Rheumatoid Arthritis, Osteoarthritis, Osteoporosis and Juvenile Idiopathic Arthritis.

1. Introduction

1.1 Why Joint Replacement?

Joint replacement of the hip or knee ranks at or near the top among medical and surgical interventions in terms of cost-effectiveness and capacity to improve an individual's quality of life. These procedures are common in Australia with more than 62,000 hip and knee replacements performed each year.

Waiting times for surgery and for initial assessment can however be protracted and may lead to further worsening of a patient's condition, including their overall physical and psychosocial wellbeing.

Efforts to facilitate the referral process and to optimise patient management in the lead up to surgery are important, and go hand in hand with efforts to improve access to surgical services as well as access to allied health services.

Clinical urgency systems are in use throughout Australia and are generally based on broad urgency categories [3];

- Category 1 (urgent) - admission within 30 days desirable for a condition that has the potential to deteriorate quickly to the point that it may become an emergency;
- Category 2 (semi-urgent) - admission within 90 days desirable for a condition causing some pain, dysfunction or disability but that is not likely to deteriorate quickly or become an emergency; and
- Category 3 (non-urgent) - admission at some time in the future acceptable for a condition causing minimal or no pain, dysfunction or disability, that is unlikely to deteriorate quickly and that does not have the potential to become an emergency.

In addition to these broad categories, prioritisation systems that rank patients in a transparent, explicit and "fair" way according to their clinical need for surgery and their capacity to benefit, have been found to be beneficial. [1,2,11].

The success of urgency and prioritisation systems relies on the input of accurate and relevant information to support the prioritisation process, including information about the impact of the patient's condition. A referral system developed with collaboration between general practitioners, orthopaedic surgeons, hospital outpatient departments and consumers, has the potential to improve the quality and timeliness of care of people with osteoarthritis.

In recognition of the varied systems in place nationally, the content and resources contained in this Guide are not prescriptive but may be used to establish systems for referral or to support continued improvement of existing systems.

1.2 Purpose of the guide

This guide has been developed to improve the care of people with arthritis by supporting decision making regarding joint replacement and supporting delivery of best practice care while patients are waiting for surgery.

In particular the guide aims to support the multidisciplinary team involved in patient care in:

- identifying patients who may require referral for orthopaedic assessment;
- advising patients and their families about the process and likely outcomes of the referral process;
- facilitating timely assessment through the provision of a comprehensive referral request; and
- supporting optimal management for the patient and their family /caregivers while the patient is waiting for assessment and surgery.

The guide is one of a suite of documents designed to support best practice management of musculoskeletal disease in primary care. Related documents include clinical guidelines for Rheumatoid Arthritis, Osteoarthritis, Osteoporosis and Juvenile Idiopathic Arthritis (these documents are currently being finalised).

The guide is particularly relevant to:

- General practitioners and specialists referring patients for orthopaedic assessment, either privately or to public outpatient clinics;
- Allied health professionals involved in the primary and multidisciplinary/integrated care of individuals with arthritis, namely:
 - physiotherapists
 - occupational therapists
 - dieticians
 - social workers
 - orthotists
 - exercise physiologists
 - pharmacists and
 - podiatrists.

In recognition of the varied systems in place nationally, the content and resources contained in this Guide are not prescriptive but may be used to establish systems for referral or to support continued improvement of existing systems.

The tools are designed to be incorporated into medical software and to integrate with system improvements taking place at a number of levels.

1.3 Content of the guide

The guide comprises information and accompanying tools to help practitioners manage their patients with arthritis. It includes:

- an **algorithm** that summarises the management process, highlighting conservative management, communication and comprehensive referral documentation as key steps;
- the patient completed **Hip and Knee Questionnaire** which provides a tool for assessing and monitoring the impact of the disease on the patient;
- an **Arthritis Referral Template** which aims to facilitate the referral process by guiding provision of comprehensive referral information;
- a **Patient Information Sheet** to help inform patients about the referral process and sources of additional information.

2. The Hip and Knee Questionnaire

2.1 What is the Hip and Knee Questionnaire?

The Hip and Knee Questionnaire is an assessment tool developed by the Victorian Department of Human Services in conjunction with Melbourne Health and the University of Melbourne, to assist prioritisation of orthopaedic outpatient appointments and prioritisation for joint replacement surgery. It has been developed in conjunction with orthopaedic surgeons and validated against known standards.

The *Hip and Knee Questionnaire* provides specific information about the impact of the patient's condition. The questionnaire comprises a series of eleven questions that aim to assess:

- **Pain** - including the effect on sleep interruption and while resting;
- **Limitations** caused by daily activities - including walking and self care;
- **Psychological health** - including psychological wellbeing and carer roles;
- **Economic impact**, including the ability to perform paid work; and
- **Recent deterioration**.

These domains represent key areas that help determine the need for joint replacement surgery and are considered in conjunction with the clinical assessment of disease severity when patients are prioritised for orthopaedic assessment and surgery.

The questionnaire has been developed for hip and knee joint arthritis however the items appear to have considerable face validity for arthritis affecting other joints.

Further information about the development of the questionnaire may be found at <http://www.health.vic.gov.au/electivesurgery/pubs/owlsunrep.pdf>

The questionnaire has been developed for hip and knee joint arthritis however the items appear to have considerable face validity for arthritis affecting other joints.

2.2 How is the questionnaire administered and interpreted?

The questionnaire is presented in a tick box format and is completed by the patient (with or without assistance from the health practitioner or carer).

It is available in a number of different languages, including:

- Arabic
- Chinese
- Croatian
- English
- Greek
- Italian
- Macedonian
- Maltese
- Polish
- Russian
- Spanish
- Turkish
- Vietnamese

The Hip and Knee Questionnaire has been validated and cannot be changed.

Not all domains addressed by the questionnaire contribute equally to a determination of the need for surgery. The domains listed above are weighted according to their importance in determining need for surgery.

Based on these weightings, a **score** (0 -100) is calculated using a mathematical algorithm. The score is a **relative** rather than an absolute measure of the need for surgery - thus there is no 'cut off' point to indicate appropriateness for surgical intervention. However, repeat administration of the questionnaire for a particular patient does provide an indication of

2.3 How may the Hip and Knee Questionnaire be used to assist the referral and management processes?

The Hip and Knee Questionnaire may be used in a number of ways to assist in the referral and management of arthritis patients who may require joint replacement.

2.3.1 Patient referral

The Hip and Knee Questionnaire provides a standard assessment of the impact of a patient's arthritic condition and thus the possible need for surgery. Inclusion of the Hip and Knee responses with the comprehensive request for referral is therefore likely to facilitate the referral process.

2.3.2 Patient monitoring

As identified above, repeat administration of the Hip and Knee Questionnaire provides an indication of improvement or deterioration for a particular patient and thus assists in optimising conservative management. The responses alone provide a reasonable guide and help to identify domains of particular concern. The score enables comparison over time and thus assists in monitoring.

The tool is useful for general practitioners and for other allied health professionals involved in supporting optimal conservative management.

2.3.3 Use by the orthopaedic surgeons and orthopaedic outpatient departments for prioritising appointments

Currently, systems are limited for prioritising initial orthopaedic assessment both in private practice and public outpatients. Patients are often seen in the order in which referrals are received with limited consideration of the severity or impact of the disease.

Orthopaedic surgeons and outpatient departments may adopt the Hip and Knee Questionnaire as part of their triage systems, requiring referring doctors to provide a completed questionnaire with referral, or requiring new patients to complete the questionnaire prior to an appointment being confirmed.

The questionnaires are processed using a computer based program which calculates the weighted Hip and Knee score.

Orthopaedic services may periodically resend questionnaires to patients to assess any change or deterioration in their condition, which may warrant reprioritisation or review of conservative management approaches.

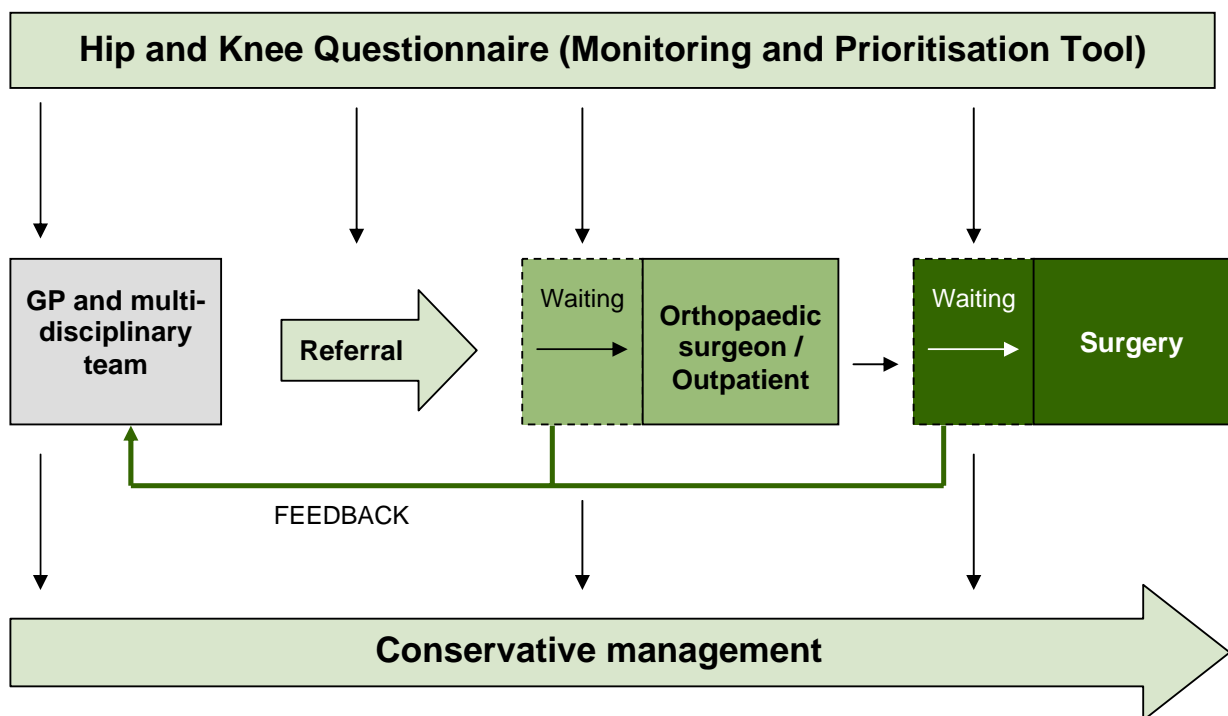
A number of orthopaedic services are known to be using the Hip and Knee Questionnaire as part of a new service model featuring early assessment by a non-medical musculoskeletal clinic, including review and optimisation of conservative management (<http://www.health.vic.gov.au/electivesurgery/pubs/owlsumrep.pdf>).

2.3.4 Use by the orthopaedic surgeons and orthopaedic outpatient departments to prioritise surgical waiting lists

The Hip and Knee Questionnaire may also be used, along with other clinical information, to prioritise surgical waiting lists.

Figure 1 below illustrates how the Hip and Knee Questionnaire may be used at various points in the management of patients with arthritis.

Figure 1. Application of the Hip and Knee Questionnaire



3. Managing patients towards joint replacement

The patient journey from onset of arthritic symptoms to eventual joint replacement usually occurs over a lengthy period of time and involves treatment by multiple health professionals across different health settings.

Primary care practitioners play an important role in:

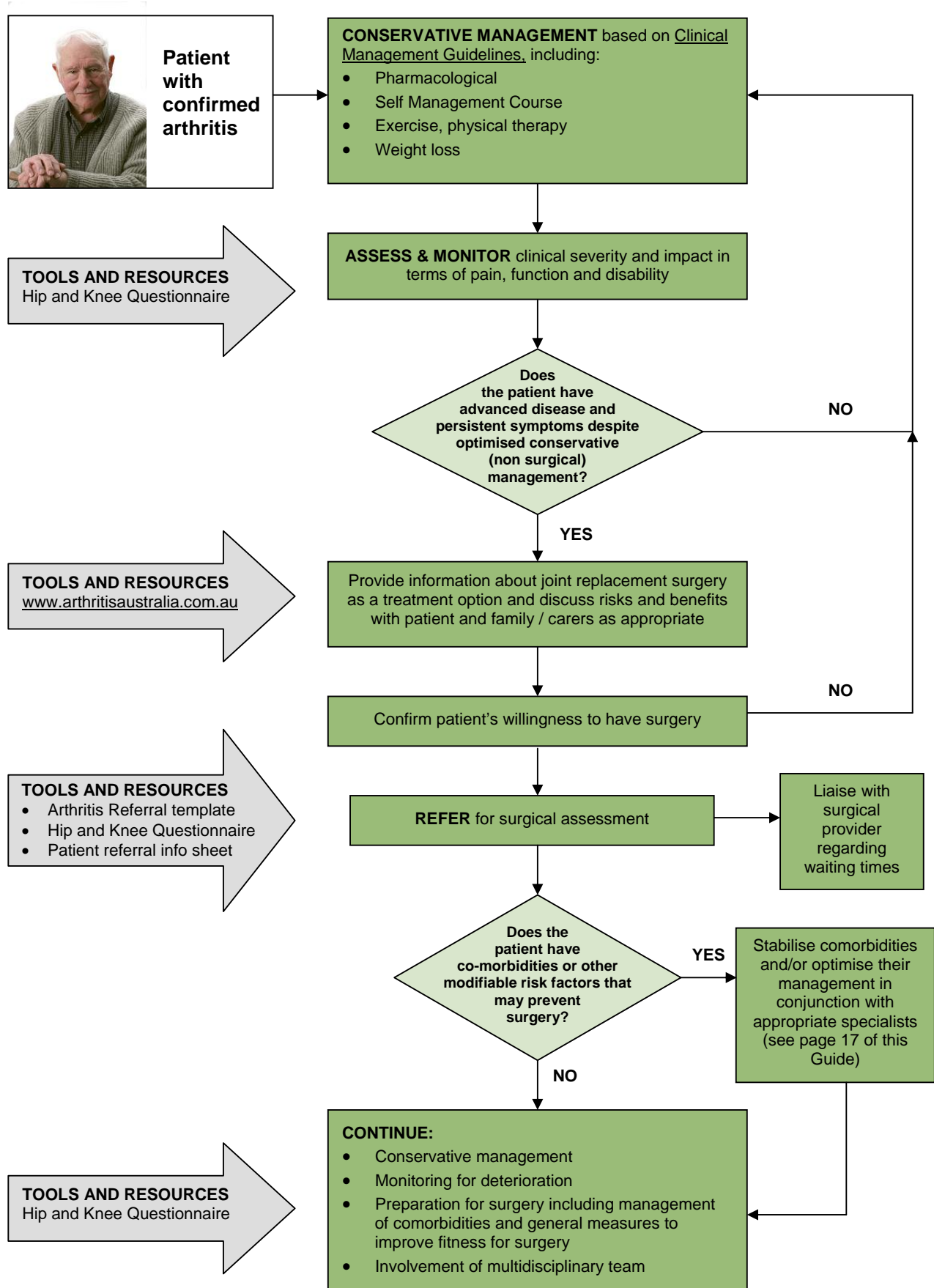
- identifying when joint replacement may be indicated;;
- ensuring the patient's conservative (non-surgical) management is optimised, including consideration of the needs of family members or carers looking after the patient ;
- informing the patient about the options available, including benefits and risks of joint replacement;
- providing comprehensive information to the orthopaedic surgeon or clinic to ensure the patient is reviewed in a timely manner;
- coordinating a patient's readiness for surgery, including consideration of family needs; and
- monitoring and managing the patient while he/she is on the waiting list.

This guide and the related clinical management guidelines are designed to assist the primary care practitioner in fulfilling these roles successfully.

Figure 2 illustrates the clinical pathway for managing a patient as they approach the need for joint replacement, including the practical steps involved and the supporting resources available.

These steps are discussed in more detail in this section.

Figure 2. Managing patients towards joint replacement



3.1 When is joint replacement surgery indicated?

Surgery should be considered when there is confirmation of advanced disease and a continuation of severe symptoms despite optimal conservative (non-surgical) treatment.

3.1.1 Are symptoms severe and continuing?

In most circumstances, the confirmation of advanced joint disease and the presence of ongoing severe symptoms, despite optimised conservative treatment, is the trigger for referral for orthopaedic assessment.

In addition to clinical severity, key indicators for joint replacement generally relate to pain and restriction of movement.

In the Victorian Orthopaedic Waiting List Prioritisation Project for hip and knee arthritis, comprehensive consultation with orthopaedic surgeons identified the following five key areas which surgeons use to assess the need for surgery:

- pain (sleep interruption and while resting);
- limitations to daily activities (walking and self-care);
- psychosocial health (psychological wellbeing and carer roles);
- economic impact; and
- recent deterioration [11].

These domains form the basis of the Hip and Knee Questionnaire. The questionnaire may be used in primary care to assess impact in these domains. The responses will be considered in conjunction with other clinical information including clinical disease severity and comorbidities.

3.1.2 Is conservative management optimised?

The clinical management guidelines in this series detail evidence-based conservative measures for the management of individuals with osteoarthritis, rheumatoid arthritis and juvenile idiopathic arthritis.

Consult these guidelines to confirm that all conservative management options have been considered.

In assessing conservative management options, consideration should also be given to the needs of family members and carers in terms of their capacity to care for the patient and themselves.

3.2 Helping patients make an informed decision about surgery as a treatment option

When referral for orthopaedic assessment and possible joint replacement surgery is indicated:

- **Provide information and support to enable the patient to make an informed decision in conjunction with family members and carers as appropriate**

Although a patient may have severe symptoms, and joint replacement is indicated, they may not be willing to undergo surgery. A likely factor is their understanding of the risks and benefits involved, as well as their understanding of the natural history of the condition if joint replacement surgery is not undertaken. The opportunity to discuss proposed surgery with a physician seems to be an important predictor of a patient's willingness to have surgery. [12].

Appropriate information should be provided and discussed with the patient and their family or carer(s) to enable them to make an informed decision. Through such discussions, patients will also be in a better position to discuss their concerns when they see the orthopaedic surgeon.

What are the principles of good health communication?

When discussing the option of joint replacement surgery with patients, the general principles of good healthcare communication apply, as summarised in the Figure 3 (overleaf).

Note that these principles apply equally to communication with carers and family members.

For further information relating to patient communication see the NH&MRC resources:

- *Making decisions about tests and treatments – Principles for better communication between healthcare consumers and healthcare professionals* (www.nhmrc.gov.au/publications/files/hpr25.pdf)
- *General Guidelines for Medical Practitioners on Providing Information to Patients* (www.nhmrc.gov.au/publications/files/e57.pdf)
- *Communicating with Patients — Advice for Medical Practitioners* (www.nhmrc.gov.au/publications/files/e58.pdf)

Figure 3. Principles of good health communication

Principle 1 — Good communication between healthcare consumers and healthcare professionals has many benefits

There is evidence that good communication helps to build trusting relationships between consumers and professionals, leads to greater satisfaction on both sides; helps people to take more responsibility for their own health, and reduces medical errors and mishaps.

Principle 2 — Healthcare consumers vary in how much participation in decision making they desire

Some consumers prefer to make their own decisions about their healthcare, others prefer to give the responsibility to the professional, and many are somewhere between these two extremes. Also, a person's preferences for involvement may vary; for example, depending on how serious the medical situation is.

Principle 3 — Good communication depends on recognising and meeting the needs of healthcare consumers

Factors such as age, gender, health status, education and cultural background can affect communication between consumers and professionals. Recognising the impact of such factors helps to improve communication.

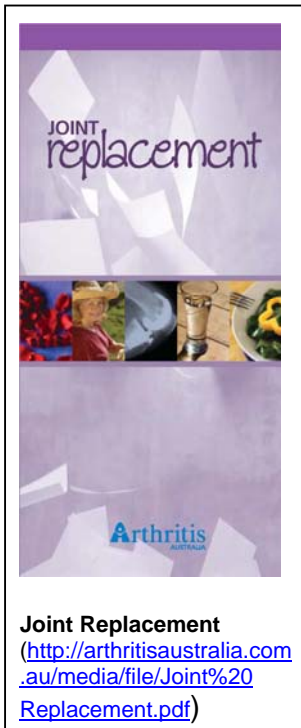
Principle 4 — Perceptions of risks and benefits are complex, and priorities may differ between healthcare consumers and healthcare professionals

Perceptions of risks and benefits are shaped by influences such as personal experiences, emotions and education, and thus differ from one person to another. Communicating these perceptions can help consumers and professionals to understand the other's perspective and arrive at decisions that meet the needs of the individual consumer.

Principle 5 — Information on risks and benefits needs to be comprehensive and accessible

Communicating risk in a way that is objective, useful and unbiased means taking into account factors such as emotions, language, images and perceptions; relevance and amount of information; uncertainty; and the effects of 'framing' information (for example, by portraying it in a positive or negative way).

From: Making decisions about tests and treatments – Principles for better communication between healthcare consumers and healthcare professionals, NHMRC, 2005, Australian Government Department of Health and Ageing. Copyright Commonwealth of Australia reproduced by permission [13].



Information resources relating to joint replacement are available and include a comprehensive guide produced by Arthritis Australia (2004).

This guide provides a useful basis for your discussion of the benefits and risks of joint replacement. It is currently only available on the internet (not as hard copy)
(<http://arthritisaustralia.com.au/media/file/Joint%20Replacement.pdf>)

Various other websites also provide information on arthritis and joint replacement surgery and are included in the **Patient Information** handout (see Resources, page 30).

General information on **surgical waiting times** may also assist your discussions with the patient and their family. This is particularly important for ensuring the patient and family have realistic expectations about the possible timeframes for surgery. Web links for this information are provided in the patient handout and the Useful Contacts section of this Guide, page 31. Individual hospital websites may also provide more detailed information about waiting times.

Specific information for families and carers is also important. Information about carer issues and needs including respite care, education sessions and counseling is available from Carers' Australia and local State branches. Refer www.carersaustralia.com.au. Contact details are provided in the patient handout (page 31).

3.3 Making a referral - what information assists the orthopaedic surgeon?

The referral documentation is an important mechanism of communication between the referring doctor and the outpatient department or orthopaedic surgeon. The referral should provide information to support the surgeon in:

- Confirming the diagnosis;
- Assessing the severity and impact of the condition;
- Identifying factors that might require specialist medical assessment;
- Identifying factors that might need to be considered in the consent process (e.g. cognitive impairment);
- Confirming that the person understands the reason for the specialist orthopedic referral.

Tools available to support the referral process include:

- Hip and Knee Questionnaire (see page 26)
- Arthritis Referral Template (see page 28)
- Patient Information Sheet – “You have been referred for an orthopaedic assessment” (see page 30)

The referral is an important opportunity to facilitate the prioritisation of requests for orthopaedic assessment by the orthopaedic surgeon or the outpatient department.

Information required for referral documents have been described in general terms as [37]:

- Clear and detailed identifiers of the patient and the referring practitioner;
- History of the presenting complaint, including:
 - examination findings;
 - investigation results; and
 - management to date.
- Past medical history highlighting areas relevant to the referral;
- Reason for referral and expectation of the referral outcome;
- Current and recent medication including over the counter medication;
- Clinical warnings such as allergies and blood borne viruses;
- Smoking status and alcohol consumption; and
- Additional relevant information and special needs, including patient’s needs, family/carer considerations and social circumstances as appropriate.

Structured referral sheets have been found to be a useful way of supporting provision of such information in a consistent way [36].

Standard generic templates are now available and are used increasingly to help ensure consistent data collection and transfer across the health system (e.g Victorian Sctt Coordination Tool Template <http://www.health.vic.gov.au/pcps/coordination/sctt2006.htm#guidelines>). These are likely to be increasingly utilised as electronic data management becomes a routine aspect of health service delivery.

With this in mind an **Arthritis Referral Template** has been developed to help facilitate the referral process (refer page 28).

Tailored specifically for the arthritis patient, the **Arthritis Referral Template** is based on existing generic templates, with additional fields to suit the information requirements for orthopaedic assessment. It includes details of:

- diagnosis;
- current conservative management;
- reason for referral;
- comorbidities;
- current medication;
- investigations;
- allergies; and
- general urgency rating.

The Arthritis Referral Form is provided as a pdf file and as a template suitable for downloading into popular prescribing software.

The **Hip and Knee Questionnaire** covers the key issues regarded by orthopaedic surgeons as relevant to prioritisation for hip and knee surgery and is therefore a valuable addition to the referral documentation.

3.4 What about fitness for surgery?

The surgeon has ultimate responsibility for determining a patient's fitness to proceed with surgery and to explain to the patient the potential risks and gains of the procedure. Thus the existence of comorbidities should not preclude referral. The general practitioner does however have an important role in the detection and management of comorbidities that may affect fitness for surgery.

When making a referral for orthopaedic assessment:

- identify and develop a plan for appropriate stabilisation of comorbidities;
- seek specialist advice as required; and
- consider referral for Allied Health Assessment.

Fitness for surgery means the absence, or adequate control, of medical conditions that are known to increase the risk of morbidity and peri-operative mortality. It also encompasses the concept of optimised general health and wellbeing in the absence of specific medical conditions. Careful pre-operative assessment and peri-operative care may prevent many complications and reduce cancellation of surgery.

The general practitioner has an important role in the detection of comorbidities that may affect fitness for surgery, and in the appropriate management of such conditions. The general practitioner also has a role in encouraging the patient to ensure their general health status supports an optimal surgical outcome.

What are the main comorbidity risks and when should you refer for specialist assessment?

Contraindications for joint replacement are the same as for other major surgery and most are related to anaesthetic risk. With modern surgical and anaesthetic techniques there are no absolute contraindications however some comorbidities increase the chance of complications and operative mortality. The surgeon will discuss these with the patient.

It is beyond the scope of this guide to cover the management of all comorbidities in relation to joint replacement, however the following information provides a broad guide to assist identification of at risk patients and to guide specialist referral. Reviews are also listed in the reference section.

Risk factors for operative mortality from all causes have been identified in a review of male veterans. These do not necessarily preclude referral for surgery and include [14,15]:

- being elderly or infirmed
- sepsis
- malignancy
- current smoking
- immobility
- acute myocardial infarction or unstable angina with the last 6 months
- poorly controlled congestive heart failure
- severe chronic obstructive pulmonary disease
- chronic renal failure
- cirrhosis

Health conditions which may broadly influence fitness for joint replacement surgery, including non-fatal complications, are summarised in Figure 4. This list provides a general guide as to the comorbidities that should be stabilised and/or considered for special management prior to surgery and that may require specialist consultation. Importantly, these conditions pose different levels of increased risk and they present different risks for different types of surgical complication. These factors need to be considered when prioritising management.

For example, prevention of **cardiovascular complications** is an important consideration. These account for a significant proportion of peri-operative complications (estimated as a third of complications in a study of male veterans [14]).

Major risk, including risk of peri-operative myocardial infarction, heart failure or death, has been associated with:

- unstable or severe angina;
- acute myocardial infarct (within 7 days of scheduled operation);
- recent myocardial infarct (more than 7 days but within 30 days of the scheduled operation) with evidence of important ischaemia risk by clinical symptoms or non-invasive study;
- decompensated heart failure;
- significant arrhythmias; and
- severe valvular heart disease [16].

Where such major risks exist, consideration should be given to delaying or cancelling surgery and referring for specialist management including coronary angiography.

Intermediate cardiovascular risk is associated with:

- mild angina pectoris
- prior myocardial infarction
- compensated or prior congestive heart failure
- diabetes mellitus
- renal insufficiency

Figure 4. Comorbidities to consider when preparing for joint replacement surgery

With modern surgical and anaesthetic techniques there are no absolute contraindications however some comorbidities increase the chance of complications.

This checklist provides a general guide as to the comorbidities that should be stabilised and/or considered for special management prior to surgery and that may require specialist consultation.

Medications

- Anticoagulant medication
- Antiplatelet medication
- Other medication that can affect haemostasis
- Corticosteroids (potential adrenal suppression)
- Benzodiazepines (withdrawal)
- Multiple medications (>5)

Other risk factors

- Alcohol intake
- Smoker or ex-smoker
- Patient, or a family member, has had an adverse outcome under anaesthesia
- History of severe allergic reaction

Respiratory conditions:

- Chronic obstructive pulmonary disease
- Asthma
- Obstructive sleep apnoea
- Past history of pulmonary embolus

Neurological conditions:

- Parkinson's Disease
- Seizures
- Epilepsy
- Cerebrovascular disease /past history of stroke
- Myasthenia gravis
- Amyotrophic Lateral Sclerosis

Cardiovascular conditions:

- Unstable angina
- Congestive heart failure
- Hypertension
- Valvular disease
- Cardiomyopathy
- Recent myocardial infarction
- Congenital heart disease
- Heart murmur
- Arrhythmia
- Pacemaker

Other conditions :

- Diabetes mellitus (treated with oral medication or insulin)
- Chronic renal failure
- Thyroid disease
- Morbid obesity
- Rheumatoid arthritis – stability of risk complications from other non joint sites
- Ankylosing spondylitis
- Bleeding disorder
- Anaemia
- Gastro-oesophageal reflux
- Inability to walk a city block or climb a flight of stairs (a risk factor for peri-operative cardiac morbidity)
- Recent deterioration in a pre-existing medical problem
- Poor general medical condition and functional capacity
- Local infection at proposed site of surgery

These risks become more significant where there is poor functional capacity or where there is high surgical risk associated with the procedure itself. Orthopaedic surgery is generally classified as intermediate in terms of its cardiac risk, however specialist referral should be considered in circumstances of poor functional capacity where the above clinical risks exist (16).

Pulmonary complications including atelectasis, pneumonia, respiratory failure and exacerbation of underlying respiratory failure, are also common, with an overall prevalence of 9.5% [14,15]

Evidence –based guidelines developed recently by the American College of Physicians [17], identify significant risk factors for pulmonary complications to include:

- chronic obstructive pulmonary disease;
- congestive heart failure;
- poor functional capacity;
- age older than 60;
- American Society of Anesthesiologists classification II or greater (meaning a patient with mild systemic disease or worse); and
- low serum albumin (<35g/L).

However, another recent review recommends that uncontrolled asthma should be stabilised before surgery [18].

What about strategies for general pre-operative preparation including lifestyle factors?

Tobacco smoking is a well established risk factor for both intra and post-operative complications [19-21]. However the risk is more in relation to wound related complications than to major cardiac or pulmonary complications. The Australian and New Zealand College of Anaesthetists recommend that all patients be encouraged to stop smoking at least 6 to 8 weeks before surgery but smoking cessation 12 hours or more before surgery can have benefits in the peri-operative period [22-24].

Smoking cessation guidelines are available for Australian General Practice (http://www.health.gov.au/internet/wcms/publishing.nsf/content/health-pubhlth-publicat-document-smoking_cessation-cnt.htm) [25].

A further useful resource is the SNAP (smoking, nutrition, alcohol and physical activity) Guide, a population health guide to behavioural risk factors in general practice (<http://www.racgp.org.au/guidelines/snap>) [26].

The reduction of **excess body weight** prior to surgery is usually advised as obesity is a risk factor for a number of chronic health conditions which may affect fitness for surgery. The National Health and Medical Research Council has produced a guide for general practitioners on the clinical management of weight in adults (http://www.health.gov.au/internet/wcms/publishing.nsf/Content/obesityguidelines-guidelines-gp_guide.htm) [27].

While **therapeutic exercise** has been shown to generally improve physical function in people with osteoarthritis [28-30], the specific evidence pertaining to the role of exercise before joint replacement surgery is limited [31-33].

Although there is limited high quality evidence regarding the long term effectiveness of **fitness for surgery programs**, some Australian hospitals have introduced programs. They are often multi-disciplinary programs targeting musculoskeletal fitness, weight and nutrition management and functional and psychological readiness for surgery and appear to support patients in a variety of ways.

3.5 Optimising care for people waiting for joint replacement surgery

Optimal care includes:

- **conservative management as per evidence-based guidelines;**
- **communication with family/caregivers if present and as appropriate;**
- **communication between care providers across disciplines; and**
- **the use of Medicare Chronic Disease Management items, where appropriate**

Unfortunately referral for orthopaedic assessment can be regarded as a treatment outcome in its own right. Optimal care involves, ongoing monitoring and optimal conservative management, even after a patient has been scheduled for surgical treatment.

This will include:

- **Optimisation of pain management** (refer nps.org.au and refer OA and RA Clinical Guidelines);
- **Referral for allied health support**, including exercise therapy, nutrition advice, weight loss, occupational therapy, etc;
- **Monitoring to identify any deterioration** which may impact on the quality of life and the urgency of surgical intervention (including use of the Hip and Knee Questionnaire);
- **Support and education to encourage self management ;**
- **General measures to support quality of life** and independent living, including attention to family/caregivers needs as appropriate;
- **Attention to comorbidities** such as cardiovascular disease and diabetes, including specialist referral as required; and
- Ongoing monitoring of the **patient's willingness** to have surgery.

Management may involve a multidisciplinary team comprising general practitioner, medical specialists and allied health professionals as well as family members/caregivers.

This can be supported by the **Enhanced Primary Care Chronic Disease Management** items on the Medicare Benefit Schedule.

The changes made to the Enhanced Primary Care Medicare Benefit Schedule (MBS) items in 2005 lead to the creation of six new Chronic Disease Management items. Patients waiting for joint replacement surgery may qualify for these Enhanced Primary Care Chronic Disease Management items, as outlined overleaf.

Enhanced Primary Care Chronic Disease Management

- From 1 July 2005 GPs have access to specific MBS items relating to:
 - preparation of a GP Management Plan (item 721),
 - review of a GP Management Plan (item 725); and
 - co-ordination of Team Care Arrangements (items 723 and 727).

In addition, patients who have both a GP Management Plan and a Team Care Arrangement in place have access to 5 allied health and 3 dental care services in a 12 month period.

Further information about these items can be obtained from

<http://www.health.gov.au/internet/wcms/publishing.nsf/Content/pcd-programs-epc-chronicdisease>, from your local Division of General Practice or RACGP.

- Other MBS items may also be relevant in specific instances. Case Conferencing allows health providers to exchange information and plan care, while the Domiciliary Medication Management Review enables review and optimisation of medication management by the GP and pharmacist. Further information can be obtained from <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/Enhanced+Primary+Care+Program-1>
- Self Management Care Plans can be included in the GP Management Plan. Information on self management care can be found at the RACGP website at <http://www.racgp.org.au/Content/NavigationMenu/ClinicalResources/RACGPGuidelines/SharingHealthCare/20020703gp.pdf>

4. Tools and Resources

Tools and resources included to support management of patients towards joint replacement include:

- **Hip and Knee Questionnaire**

the questionnaire is available in a number of different languages, including:

- Arabic
- Chinese
- Croatian
- English
- Greek
- Italian
- Macedonian
- Maltese
- Polish
- Russian
- Spanish
- Turkish
- Vietnamese

- **Arthritis Referral Template**

- **Referral Information Sheet** for patients and carers – “You have been referred for orthopaedic assessment” to be provided to the patient at the time of referral.
- **Links and contacts** for more detailed information about joint replacement to support decision making by patients and carers.

4.1 Hip and Knee Questionnaire

To be completed by patient with or without assistance from doctor or carer

Please answer the following questions in relation to the hip or knee joint that is giving you the most problem. For the following questions, think about how your condition 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). Please tick one box only for each question.

Which hip or knee joint is giving you the most problem? _____

The following questions apply to this joint.

<p>1. Do you have pain in the affected joint that does not get better even when you rest?</p> <p><input type="checkbox"/> None or mild pain</p> <p><input type="checkbox"/> Moderate pain</p> <p><input type="checkbox"/> Severe pain</p> <p><input type="checkbox"/> Extremely severe pain</p> <p><input type="checkbox"/> The pain is so severe that I cannot bear it</p>	<p>4. Does the affected joint affect your enjoyment of life?</p> <p><input type="checkbox"/> No, or only a little</p> <p><input type="checkbox"/> It makes it moderately difficult for me to enjoy my life</p> <p><input type="checkbox"/> It makes it very difficult for me to enjoy my life</p> <p><input type="checkbox"/> It makes it extremely difficult for me to enjoy my life</p> <p><input type="checkbox"/> I cannot enjoy my life at all because of my problem site</p>
<p>2. Do you have pain in the affected joint when you first go to bed at night that stops you going to sleep?</p> <p><input type="checkbox"/> No or rarely</p> <p><input type="checkbox"/> I have pain that sometimes stops me going to sleep</p> <p><input type="checkbox"/> I have pain that often stops me going to sleep</p> <p><input type="checkbox"/> I have pain that stops me going to sleep most of the time</p> <p><input type="checkbox"/> I have pain that stops me going to sleep all the time</p>	<p>5. Does your affected joint cause difficulties with your relationships with people close to you (such as wife, husband, children and close friends)?</p> <p><input type="checkbox"/> No, it does not cause difficulties with my relationships</p> <p><input type="checkbox"/> It sometimes causes difficulties with my relationships</p> <p><input type="checkbox"/> It often causes difficulties with my relationships</p> <p><input type="checkbox"/> Most of the time it causes difficulties with my relationships</p> <p><input type="checkbox"/> All of the time my problem site causes difficulties with my relationships</p>
<p>3. Do you have pain in the affected joint that limits your activity?</p> <p><input type="checkbox"/> My activity is not limited by pain at the problem site</p> <p><input type="checkbox"/> I can undertake activity for at least 30 minutes before pain at the problem site stops me</p> <p><input type="checkbox"/> I can undertake activity for about 10 to 15 minutes before pain at the problem site stops me</p> <p><input type="checkbox"/> I can only undertake activity for a short time</p> <p><input type="checkbox"/> I am not able to undertake certain activities at all because of pain at the problem site</p>	<p>6. Does your affected joint make it difficult for your household (yourself, family and others) to manage financially?</p> <p><input type="checkbox"/> No, it does not affect my household finances</p> <p><input type="checkbox"/> It makes it slightly difficult to manage financially</p> <p><input type="checkbox"/> It makes it moderately difficult to manage financially</p> <p><input type="checkbox"/> It makes it extremely difficult to manage financially</p> <p><input type="checkbox"/> My household cannot manage financially at all because of my problem site</p>

Continued overleaf

Hip and Knee Questionnaire (page 2)

<p>7. Does your affected joint make it difficult for you to look after yourself (such as washing yourself, getting dressed, going to the toilet)?</p> <p><input type="checkbox"/> No, I can look after myself (Go to Question 6)</p> <p><input type="checkbox"/> There are some things I cannot do for myself</p> <p><input type="checkbox"/> There are many things I cannot do for myself</p> <p><input type="checkbox"/> I cannot do most things for myself</p> <p><input type="checkbox"/> I cannot look after myself because of my problem site</p>	<p>10. Have you been in <u>paid</u> work in the last 6 months?</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes, my problem site does not make it difficult for me to work</p> <p><input type="checkbox"/> Yes, but it is moderately difficult for me to continue to work because of my problem site</p> <p><input type="checkbox"/> Yes, but it is very difficult for me to continue to work because of my problem site</p> <p><input type="checkbox"/> Yes, but I have had to stop work because of my problem site</p> <p><input type="checkbox"/> Yes, but working is difficult for me for other reasons</p>
<p>8. Do you get enough help with looking after yourself (such as washing yourself, getting dressed, going to the toilet)?</p> <p><input type="checkbox"/> I get as much help as I need</p> <p><input type="checkbox"/> Most of the time I get enough help</p> <p><input type="checkbox"/> Some of the time I get enough help</p> <p><input type="checkbox"/> I rarely get enough help</p> <p><input type="checkbox"/> I do not get enough help with looking after myself</p>	<p>11. Do you need to look after people who require your care (such as a sick or disabled partner or family member)?</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes, my problem site does not make it difficult for me to look after them</p> <p><input type="checkbox"/> Yes, but it is moderately difficult for me to look after them because of my problem site</p> <p><input type="checkbox"/> Yes, but it is very difficult for me to look after them because of my problem site</p> <p><input type="checkbox"/> Yes, but I am unable to care for them because of my problem site</p> <p><input type="checkbox"/> Yes, but it is difficult for me to look after them for other reasons</p>
<p>9. Overall, is the problem with your affected joint different now compared with how it was <u>6 months ago</u>?</p> <p><input type="checkbox"/> It is better now</p> <p><input type="checkbox"/> It is about the same now</p> <p><input type="checkbox"/> It is a little worse now</p> <p><input type="checkbox"/> It is moderately worse now</p> <p><input type="checkbox"/> It is very much worse now</p>	<p>For office use only</p> <p>SCORE: _____</p>

The Hip and Knee Questionnaire is copyright
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No part of the questionnaire may be reproduced or altered in any form without written permission from the
Victorian Department Human Services

4.2 Arthritis Referral Form

The following form reflects the format of existing electronic templates available through medical software applications. In particular this design reflects the current approach adopted by Medical Director (Health Communications Network).

GP Referral Form for specialist Orthopaedic Assessment

Referral Date: <<Miscellaneous:Date (long)>>
GP Review Date: <<Date for patient review>>
Feedback Requested: Yes

Referral to:

<<Addressee:Name>>
<<Addressee:Full Address>>
Phone: <<Addressee:Phone>> Fax:
<<Addressee:Fax>>
Email: <<Addressee:E-mail>>

Service requested: <<Service Requested:>>

Referring General Practitioner:

<<Doctor:Name>>
<<Practice:Name>>
<<Practice:Address>>
Phone: <<Practice:Phone>> Fax:
<<Practice:Fax>>
Email: <<Doctor:E-mail>>
Provider No.: <<Doctor:Provider Number>>

Consumer details:

Name:<<Patient Demographics:First Name>>
<<Patient Demographics:Surname>>

Date of Birth:<<Patient Demographics:DOB>>
Preferred Name/s: <<Patient
Demographics:Greeting>>
Sex:<<Patient Demographics:Sex>>
Title:<<Patient Demographics:Title>>

Contact Address:

<<Patient Demographics:Full Name>>
<<Patient Demographics:Address>>
<<Patient Demographics:City>>
<<Patient Demographics:State>>
<<Patient Demographics:Postcode>>
Phone: <<Patient Demographics:Phone
(Home)>>
Work: <<Patient Demographics:Phone
(Work)>>
Mobile: <<Patient Demographics:Phone
(Mobile)>>
Email: <<Patient Demographics:E-mail>>

Alternative Contact:

<<Alternative Contact (Name/Ph/Relationship)>>

Reason for patient referral:

<<Reason for Referral>>

Other Notes (eg Current services): <<Other Notes (eg Current services)>>

Interpreter required: <<Does the patient require an
interpreter?>>

Preferred language is: <<If interpreter needed,
which language>>

Pension Card Number: <<Patient
Demographics:Pension Number>>

DVA Number: <<Patient Demographics:DVA
Number>>

Insurance: <<Patient Demographics:Health
Insurance>>

Medicare Number: <<Patient
Demographics:Medicare Number>>

Consent to referral and sharing of relevant information:

<<Consent to referral and sharing of relevant info?>>

<<Doctor:Name>>

<<Patient Demographics:First Name>> <<Patient Demographics:Surname>>

Clinical Information:

Warnings: <<Clinical Details:Warnings>>

Allergies: <<Clinical Details:Allergies>>

Current Medication:

<<Clinical Details:Medication List>>

Social History: <<Clinical Details:Social History>>

Past Medical History:

<<Clinical Details:History List>>

Progress Notes:

<<Summary:Progress Notes (Selected)>>

Investigation Results:

<<Summary:Investigation Results (Selected)>>

*** Additional information required for orthopaedic assessment**

Patients expectation of referral outcome:

Main site affected:

Diagnosis:

- Osteoarthritis
- Rheumatoid arthritis
- Juvenile arthritis
- Other
- Diagnosis unclear

Basis of diagnosis:

- Clinical only
- X-ray X-ray date:
- Report attached (include weight bearing views)

Main impact on individual:

Hip and Knee Questionnaire score:

Urgency of orthopaedic assessment:

- High
- Moderate
- Low

Falls:

Number in last 12 months:

History of conservative management

(tick only those that are relevant to referral):

- Simple analgesics
- Non-selective NSAIDs
- Cox-2 inhibitors
- Disease Modifying Anti-Rheumatic Drugs (DMARDs)
- Intra-articular injections (Corticosteroid)
- Intra-articular injections (Hyaluronan)
- Prednisolone
- Opioid analgesia
- Tramadol
- Physiotherapy
- Nutritional assessment
- Occupational therapy (Activity of Daily Living Assessment)
- Podiatry / Orthotics
- Formal self-management education program
- Other:

Relevant comorbidities & risks

Medications eg:

- Anticoagulant medication
- Antiplatelet medication
- Other medication that can affect haemostasis
- Corticosteroids (potential adrenal suppression)
- Benzodiazepines (withdrawal)
- Multiple medications (>5)

Smoking status:

- Current smoker (number:)
- Ex-smoker (quit date:)

Alcohol use:

Other surgical risks:

Additional relevant information

(eg blood borne viruses, and psychological considerations):

You have been referred for an ORTHOPAEDIC ASSESSMENT

Your Referral

You have been referred to the following orthopaedic service:

Name: _____

Address: _____

Phone: _____

What now ?

Following are useful things to consider **before you attend** your orthopaedic assessment:



Will you need an interpreter? If so let your referring doctor know.



What should you take to your appointment?

- a **list of all medicines** that you are taking including prescribed medicines, over the counter medicines and complementary/natural medicines;
- a list of any **allergies** you may have to medicines, including anaesthetics;
- the **X-rays** of your problem joints, including any X-ray reports;
- consider taking a **family member or friend** with you. They can provide support, help you to ask questions and remember information provided by the surgeon.



Do you have any questions or concerns? If so, write them down (see overleaf) and take them with you to your appointment with the orthopaedic surgeon, or to your next appointment with your GP. Your questions could be about:

- ? the type of operation or procedure you might need and how urgent it is
- ? who will perform the surgery
- ? the possible benefits and risks of the procedure, including the anaesthetic
- ? how long you might have to wait for an operation
- ? what you should do to prepare for surgery
- ? whether you will need a blood transfusion
- ? how long you might be in hospital
- ? what you will need to do after the operation e.g. when to followup with the surgeon, how to prepare your home, what support or rehabilitation you might need ?
- ? what you should do if your condition gets worse while you are waiting for surgery



Learn more about arthritis and joint replacement surgery. Discuss your condition and the operation with your doctor or get information from other reliable sources (see overleaf).

More information for patients and carers

Arthritis Australia

<http://arthritisaustralia.com.au/fact+sheets>

This site includes a wide range of helpful information and services for people with arthritis and related conditions.

A comprehensive booklet on **Joint Replacement** provides information about the risks and benefits of surgery. This can be download from the site. Hard copies can also be ordered.

Arthritis ACT: (02) 6288 4244

Arthritis NSW: (07) 3857 4200

Arthritis NT: (08) 8948 5232

Arthritis QLD: (07) 3857 4200

Arthritis SA: (08) 8379 5711

Arthritis TAS: (03) 62312988

Arthritis VIC: (03) 8531 8000

Arthritis WA: (08) 9388 2199

Living with Osteoarthritis

www.oapathway.org.au

Includes links to an information booklet called **Living with Osteoarthritis**, as well as exercise sheets, and care plans.

Carers Australia

www.carersaustralia.com.au

Provides useful information and services for family members and other carers.

CareGivers HelpLine: 1800 242 636

Surgical Waiting Lists

For information about surgical waiting lists in your State or Territory, and general information about hospital services, see the website of your local health department, or phone the elective surgery information lines below:

State	Website	Phone
ACT	www.health.act.gov.au/c/health?a=da&did=10079901	(02) 6205 1122
NSW	www.health.nsw.gov.au/waitingtimes	1800 053 456
NT		Contact hospital
QLD	www.health.qld.gov.au/surgical_access/html/info_pat.asp	Contact hospital
SA	www.health.sa.gov.au/electivesurgery/Default.aspx?tabid=54	Contact hospital
TAS		Contact hospital
VIC	www.health.vic.gov.au/yourhospitals/elective/index.htm	1300 781 821
WA	www.health.wa.gov.au/services/category.cfm?Topic_ID=2	1800 654 807

Questions for your GP or Orthopaedic Surgeon

5. Useful Contacts

Allied health services

Allied health care services can be accessed through both public and private providers. Public providers include services provided by local public hospitals and community health centres. Private providers can be located via the following Association websites: these were last accessed on -7/9/06

Australian Physiotherapy Association apa.advsol.com.au/
Dietitians Association of Australia www.daa.asn.au/
Australian Association of Occupational Therapists www.ausot.com.au/
Australian Association of Social Workers www.aasw.asn.au/
Australian Orthotic Prosthetic Association www.aopa.org.au/
Australasian Podiatry Council www.apodc.com.au
Australian Psychological Society www.psychology.org.au/

Divisions of General Practice

The Divisions of General Practice run courses for general practitioners on various topics and provide support in certain areas. Information on the various divisions and their activities can be found at:

Divisions of General Practice www.adgp.com.au/

Royal Australian College of General Practitioners

The Royal Australian College of General Practitioners offers courses on musculoskeletal conditions via the QA and CPD calendar of events and via GP Learning.

Royal Australian College of GPs www.racgp.org.au

Arthritis Australia

Arthritis Australia is represented in each State and Territory and provides support and information for people living with arthritis, promotes awareness of arthritis, funds research and provides information for health professionals.

Arthritis Australia www.arthritisaustralia.com.au/

Information on Waiting Lists

Australian Capital Territory	www.health.act.gov.au/c/health?a=da&did=10079901
New South Wales	www.health.nsw.gov.au/waitingtimes/
Queensland	www.health.qld.gov.au/surgical_access/doc/eswlr_july_06.pdf
South Australia	www.health.sa.gov.au/electivesurgery/Default.aspx?tabid=54
Victoria	www.health.vic.gov.au/yourhospitals/elective/index.htm
Western Australia	www.health.wa.gov.au/services/category.cfm?Topic_ID=2
AIHW Australian Hospital Statistics 2003-2004 (see Chapter 6 Waiting times for elective surgery)	www.aihw.gov.au/hospitals/waitingtime_data.cfm

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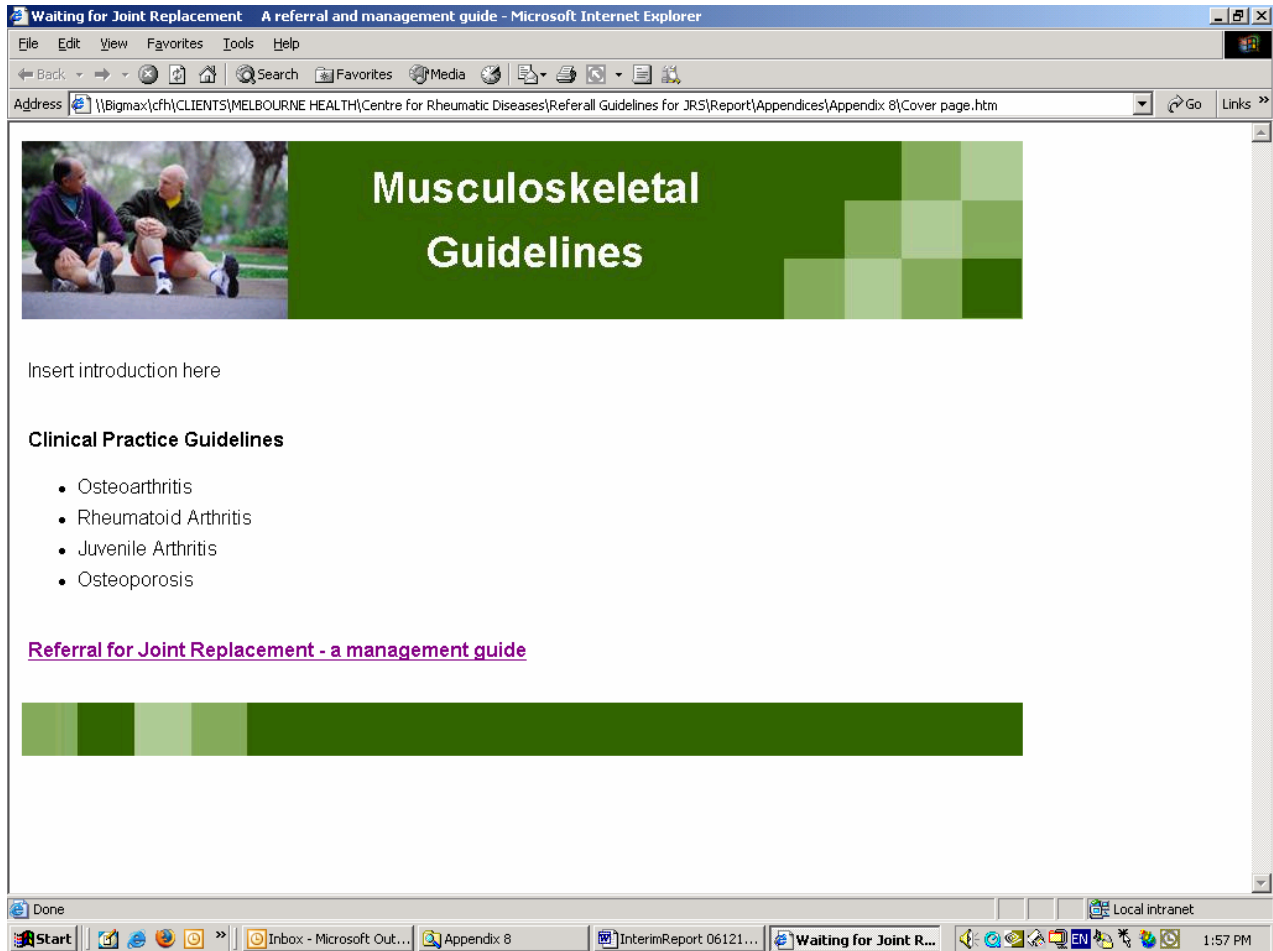
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ARTHRITIS FACTS

- Arthritis and musculoskeletal conditions are a national public health priority in Australia in recognition of the major health and economic burden these diseases place on the community [4].
- Approximately one third of respondents to the 2001 National Health Survey reported having arthritis or another long term musculoskeletal condition [4].
- After respiratory conditions, arthritis and musculoskeletal conditions were the problem managed most frequently by GPs in 2003-04, accounting for 12 per cent of problems managed. Osteoarthritis was the second most common musculoskeletal condition managed after back complaints [4].
- In 2004-05 osteoarthritis was the seventh most frequently managed problem in general practice, accounting for 1.8 per cent of 149,088 total problems and the fifth most common chronic problem managed accounting for 5.3 per cent of a total of 51,946 chronic problems managed [5].
- The need for joint replacement increases with age as does the likelihood of comorbidities. Joint replacement in younger people is becoming more frequent and this is thought to be due to an increased prevalence of risk factors such as obesity and inactivity [6]. Rheumatoid arthritis is less frequent than osteoarthritis (the most common arthritis) and multiple joints are often affected.
- In a study looking at referrals from Australian GPs to surgeons based on the BEACH data (April 1998-March 2001), it was found that a surgical referral was initiated in 12 per cent of GP encounters for knee arthritis/pain and 10 per cent of encounters for hip arthritis [7].
- Joint replacement surgery is a common procedure in Australia with more than 62,000 hip and knee replacements performed each year. Total joint replacement procedures increased 94 per cent from 32,000 (1994) to 62,000 (2005). The increased incidence of primary joint replacement is unclear but maybe related to the aging population and increasing prevalence of risk factors such as obesity. The incidence of joint replacement in people aged under 50 years is also increasing [8].
- Total joint arthroplasty of the hip and knee ranks at or near the top among medical and surgical interventions in its cost-effectiveness and capacity to improve the individuals' quality of life [9].
- In Australia, in 2004-2005, the median waiting time for total hip replacement was 106 days and 218 days for total knee replacement [10].

Appendix 1 Web-based information resource


A model internet site has been developed to illustrate the possible dissemination of the resource. Refer to electronic files for full content.



This resource has been developed to improve the care of people with end stage arthritis by supp - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address [\\Bigmax\cfh\CLIENTS\MELBOURNE HEALTH\Centre for Rheumatic Diseases\Referral Guidelines for JRS\Report\(Appendices\)\Appendix 8\page 1.htm](http://\\Bigmax\cfh\CLIENTS\MELBOURNE HEALTH\Centre for Rheumatic Diseases\Referral Guidelines for JRS\Report(Appendices)\Appendix 8\page 1.htm) Go Links



Referral for Joint Replacement

A management guide

Home

Clinical Guidelines

- Osteoarthritis
- Rheumatoid Arthritis
- Osteoporosis
- Juvenile Arthritis

Joint Replacement

Information for Health Professionals

- Referral and management guide
- [Clinical pathway](#)
- [Hip and Knee Questionnaire](#)
- [Arthritis referral template](#)

This resource has been developed to improve the care of people with arthritis by supporting decision making regarding joint replacement and supporting delivery of best practice care while patients are waiting for surgery.

In particular the resource aims to support the multidisciplinary team in:

- identifying patients who may require referral for orthopaedic assessment;
- advising patients and their families about the process and likely outcomes of the referral process;
- facilitating timely assessment through the provision of a comprehensive referral request; and
- supporting optimal management for the patient and their family / caregivers while the patient is waiting for assessment and surgery.

- [Download](#) > **Referral for Joint Replacement - a management guide**
- **Tools and resources:**
 - > [Clinical pathway](#)
 - > [Hip and Knee Questionnaire](#)
 - > [Arthritis referral template](#)

Done Local intranet

Start | [Inbox - Microsoft Out...](#) | [Appendix 8](#) | [InterimReport 06121...](#) | [This resource has ...](#) | 1:58 PM

Appendix 2 2007 Conference Dates

Organisation	Meeting date	Location	Abstract due	More information
Annual AFR Health Congress	21-23 February 2007	Sydney, NSW		http://www.informa.com.au/healthcongress07
Aust. Redesigning Healthcare Summit - Making Patient Journeys Work	27-28 February 2007	Sydney, NSW		http://www.changechampions.com.au/
APP 2007 (Aust. Pharmacy Professional)	1-4 March 2007	Gold Coast, QLD		http://www.app2007.com/
Rural Doctors Assoc. of Aust / Aust. College of Rural and Remote Medicine Symposium	7 March 2007	Albury, NSW		http://www.rdaa.com.au/
Aust. College of Emergency Nursing Conference	9-10 March 2007	Manly, NSW		http://www.nswnurses.asn.au/events/4453.html
National Case Management Society of Aust. Conference	15-16 March 2007	Melbourne, VIC	Closed	http://www.cmsa.org.au/conferences.htm
Redesigning Healthcare for the Ageing Population	27-28 March 2007	Sydney, NSW		
The future now: challenges and opportunities in health (World Congress of Health Professionals)	26-29 March 2007			
Aust. Faculty of Occupational Medicine / Aust. Faculty of Public Health Medicine	3-5 May 2007	Melbourne, VIC		http://www.iceaustralia.com/afom-afphm/
RACP Congress 2007	6-10 May 2007	Melbourne, VIC	25 January 2007	http://www.racpcongress.com/
Aust. Podiatry Council Conference	8-12 May 2007	Hobart, TAS	Closed	http://www.apodc.com.au/Conferences/2007/conference_details_2007.htm
Improving the Delivery of Emergency Care: sharing the lessons learnt	10-11 May 2007	Brisbane, QLD	15 December 2006	http://www.changechampions.com.au/
Aust. Faculty of Rehabilitation Medicine ASM	22-25 May 2007	Sydney, NSW	Closed	http://dcconferences.com.au/afrm2007/
Dietitians Assoc. of Aust. National Conference	24-26 May 2007	Hobart, TAS	Closed	http://www.tourhosts.com.au/dietitians2007/

Organisation	Meeting date	Location	Abstract due	More information
OTA NT Conference	25 May 2007	Darwin, NT	31 March 2007	http://www.ausot.com.au/newsArticle.asp?id=73
Aust. & New Zealand College of Anaesthetists ASM	26-29 May 2007	Melbourne, VIC	20 February 2007	http://www.anzca2007asm.com/
Aust. Rheumatology Assoc. / Rheumatology Health Professionals Assoc.	26-30 May 2007	Sydney, NSW	16 February 2007	http://www.araconference.com/
Better Practice 2007	24-25 May 2007 12-13 July 2007 23-24 August 2007 6-7 Sept 2007 25-26 Oct 2007 8-9 Nov 2007	Adelaide, SA Launceston, TAS Sydney, NSW Brisbane, QLD Melbourne, VIC Perth, WA	Open	http://www.accreditation.org.au/BetterPractice2007
Aust. College of Emergency Medicine Winter Symposium	21 – 23 June 2007	Launceston, TAS		http://www.cdesign.com.au/pages/conferences_current.htm
Improving the Management of Work in Hospitals	28-29 June 2007		Open	http://www.changechampions.com.au/
Royal Aust. College of Nursing Annual Conference	11-14 July 2006	Sydney, NSW		http://www.rcna.org.au/pages/annconf07.php
National Allied Health Conference	18-20 July 2007	Hobart, TAS	31 January 2007	http://www.cdesign.com.au/nahc2007/
Aust. Conference on Safety & Quality in Health Care	6-8 August 2007	Brisbane, QLD	26 February 2007	http://www.sapmea.asn.au/conventions/sqhc2007/index.html
Pharmacy Australia Congress 2007	24-16 August 2007	Melbourne, VIC		http://www.psa.org.au/ecms.cfm?id=360&CFID=4647251&CFTOKEN=59801927
Medicine Ageing & Nutrition 2007	5-8 September 2007	Adelaide, SA	30 March 2007	http://www.fcconventions.com.au/MedicineAgeingandNutrition2007/
Improving the Delivery of Services for Outpatients	27-28 September 2007	Brisbane, QLD	15 April 2007	http://www.changechampions.com.au/
RACGP Annual Scientific Convention	4-7 October 2007	Sydney, NSW	30 April 2007	http://www.racgp.org.au/asc2007
Aust. Physiotherapy Assoc. Conference Week	4-8 October 2007	Cairns, QLD	31 March 2007	http://www.apaconferenceweek07.asn.au/

Organisation	Meeting date	Location	Abstract due	More information
Aust. Orthopaedic Assoc. ASM	7-12 October 2007	Gold Coast, QLD		http://www.aoa.org.au/meetingsevents.asp
Aust. Nursing Federation National Delegates Conference	11-12 October 2007	Melbourne, VIC		
International Conference for Emergency Nurses	11-13 October 2007	Melbourne, VIC	14 February 2007	http://www.cdesign.com.au/cena2007/
Aust. Assoc. of Practice Managers Conference	17-20 October 2007	Hobart, TAS		http://www.cdesign.com.au/aapm2007/
Aust. Private Hospital Assoc. Congress	21-23 October 2007	Melbourne, VIC		http://www.apha.org.au/
Australian General Practice Network Forum	15-18 November 2007	TAS		http://www.gpnetworkforum.com.au/site/index.cfm