National Strategic Action Plan for Arthritis

Consultation draft

October 2018

NATIONAL STRATEGIC ACTION PLAN FOR ARTHRITIS

Contents

About this Action Plan

The National Strategic Action Plan for Arthritis addresses the pressing need for a coordinated and strategic national response to addressing the challenge of arthritis.

Arthritis is one of the most common, costly and disabling of all chronic conditions. In its many forms it affects nearly four million Australians of all ages, including children and young people. Yet the personal, social and economic impact of arthritis is poorly recognised and often wrongly trivialised. Misconceptions persist that arthritis is just a single condition, that it only affects old people and is an inevitable part of ageing about which nothing can be done. These misconceptions create a sense of futility among consumers, health professionals and policy makers which undermines prevention, early diagnosis and effective management of the condition.

But much can be done to prevent and better manage arthritis to reduce the severity of the condition and its impact on individuals, carers and families, health and welfare systems, and the economy.

This Action Plan sets out priorities and actions for addressing the challenge of arthritis with the objective of achieving the best possible health and life outcomes for people living with these painful and often debilitating conditions. It aims to address issues common to most forms of arthritis and has a strong focus on preventing the onset and progression of arthritis, supporting people to become active participants in their care and promoting high-value treatment and care.

The intended audiences for the Action Plan include the Australian and state and territory governments, health service providers, clinicians, consumers, researchers and research funders. Implementation will require national action and partnerships across all sectors and levels of the health system, non-government organisations, the private sector, researchers and academics, and individuals.

The Action Plan builds on the recommendations of the *Time to Move: Arthritis* strategy which was published in 2014. It also aligns closely with the goals, principles and strategic priority areas of the *National Strategic Framework for Chronic Conditions* through a shared emphasis on prevention and efficient, effective and appropriate care to optimise quality of life for people with chronic conditions.

In addition the Action Plan aligns with the World Health Organization *Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020* as well as other local Strategies and Action Plans including the National Osteoarthritis Strategy (2018) and the National Strategic Action Plan for Pain Management.

The Action Plan has been developed with the valuable input of an expert multidisciplinary Steering Committee comprising representatives of major stakeholder groups with an interest in arthritis prevention, management and care, including consumers, health professionals, researchers, policy makers and service providers. A list of Steering Committee members is provided at Appendix 1. Major contributions were also provided by the project team developing the National Osteoarthritis Strategy (2018) and participants in the Arthritis Roundtable held in December 2017.

Acknowledgements

Arthritis Australia would like to thank the many organisations and individuals who have supported and provided input to the development of this Action Plan. A list of contributors is provided in the consultation summary contained in the compendium document to this Action Plan.

In particular we would like to thank the following:

- The members of the Steering Committee who provided their valuable time and expertise to help shape the Action Plan.
- The project team developing the National Osteoarthritis Strategy, including members of the Leadership Group and Working Groups, who shared their research, deliberations and recommendations with Arthritis Australia to help inform the development of this Action Plan
- Participants in the Arthritis Roundtable held in December 2017 to identify potential actions and priorities for consideration as part of the development of the Action Plan.

Steering Committee Members

Name	State	Representing
A/Prof Ilana Ackerman	VIC	Australian Physiotherapy Association
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Professor Andrew Briggs	VIC	Curtin University
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Ms Julia Thompson	NSW	State Health Departments
Ms Deborah Tunbridge	WA	Rheumatology Health Professionals Association
Ms Leanne Wells	ACT	Consumers Health Forum
Dr Samuel Whittle	SA	Australia and New Zealand Musculoskeletal Clinical Trials Group

What is Arthritis?

Arthritis is an umbrella term for more than 100 conditions affecting the joints. These conditions cause damage to the joints, usually resulting in swelling, pain, stiffness and reduced mobility. Some forms may also affect the heart, eyes, lungs, kidneys and skin. Many types of arthritis can progress over time, with worsening symptoms and joint damage if not managed effectively.

The most common form of arthritis is osteoarthritis. Osteoarthritis is often described as 'wear and tear', but this is not an accurate description of the disease. The joints do not wear away because of too much use. Osteoarthritis is now understood to be the result of a breakdown in the body's normal joint repair processes. OA is more common in older age, but it can affect younger people, especially those with a prior joint injury. Treatment options include exercise, weight loss if required, and self-management education as first line therapies, with pharmacological therapies useful as an adjunct for some. Joint replacement is

The second most common form of arthritis is rheumatoid arthritis, an inflammatory form of arthritis in which the immune system attacks the joints and other parts of the body. Other forms of inflammatory arthritis include gout, ankylosing spondylitis, psoriatic arthritis and juvenile idiopathic arthritis. Most forms of inflammatory arthritis are auto-immune conditions. Inflammatory forms of arthritis can affect people at any age. Early diagnosis and intervention is crucial for many of these conditions. In rheumatoid arthritis for example, early diagnosis and intervention, ideally within 12 weeks of symptom onset, can prevent or delay joint damage, increase the chance of disease remission and improve long term outcomes, including reduced disability.

The challenge of arthritis

Arthritis is one of the most common, costly and disabling chronic conditions in Australia. In its many forms it affects four million Australians of all ages, including 6000 children, causing pain, stiffness, impaired physical function and reduced quality of life. This number is projected to rise to 5.4 million by 2030.

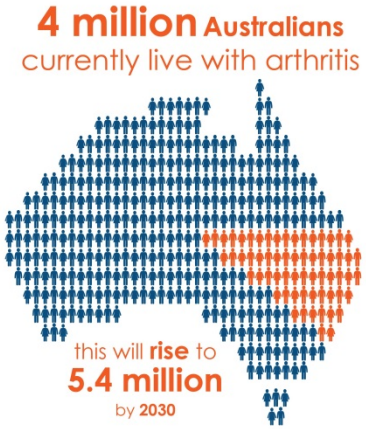
The immense personal, social and economic costs of arthritis are poorly recognised. These costs include health care costs, personal and societal costs associated with lost productivity, due to the impact of arthritis on work capacity, and, of course, the immeasurable cost of lost wellbeing. Key indicators of the cost of arthritis include:

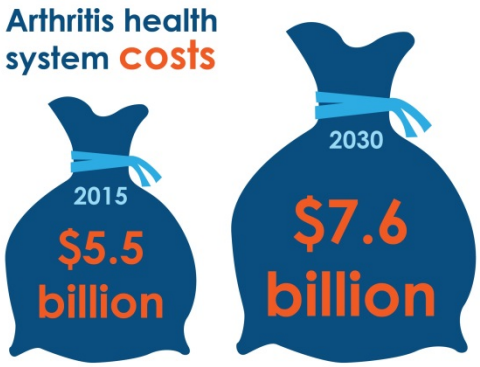
- In 2015, health system expenditure for arthritis was $5.5 billion,[1] making arthritis one of the most expensive disease groups in Australia.
- Arthritis and musculoskeletal conditions account for 12% of the total Australian disease burden, equal to mental health conditions. Arthritis alone accounts for around 8% of the total burden.[2]
- Arthritis is the leading cause of chronic pain and the second most common cause of disability after back pain.[3] One in four Disability Support Pension recipients has a musculoskeletal condition as their primary medical condition.[4]
- Arthritis has a major impact on people's capacity to work. It accounts for nearly half (40%) of the loss in full-time employment and 42% of the loss in part-time employment due to chronic disease.[5] It is also the second most common reason for early retirement due to ill health, costing $1.1 billion a year in extra welfare payments and lost taxation revenue, as well as $7.2 billion in lost GDP.[6]
- One in four people with arthritis also experiences mental health issues.[7]

Arthritis tends to be poorly managed in Australia.[8] Much money is spent on low-value or ineffective care, at great expense to both governments and individuals, while proven, effective care strategies go unfunded. For example, more than $100 million a year is spent on knee arthroscopies for osteoarthritis, including around $10 million in Medicare rebates alone[9] despite the fact that strong evidence shows the procedure is of limited value for this condition and may cause harm.[10 11]

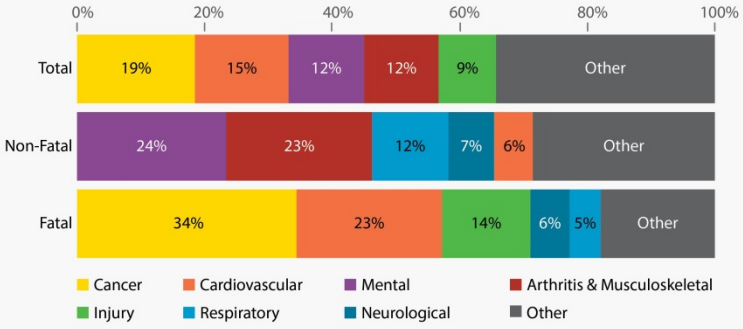
With the number of people with arthritis set to rise to 5.4 million people and health systems to $7.6 billion by 2030, there is a pressing need to investigate and implement programs to prevent and improve the management of arthritis to deliver high-value care that improves outcomes and health-related quality of life.

Arthritis is one of the most common, costly and disabling chronic conditions



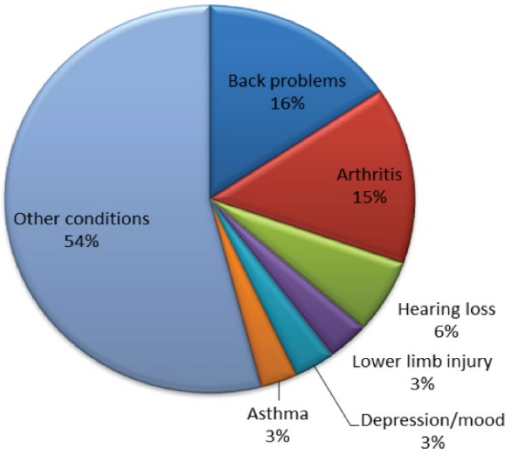


Proportion (%) of total, fatal and non-fatal burden by disease group, Australia 2011



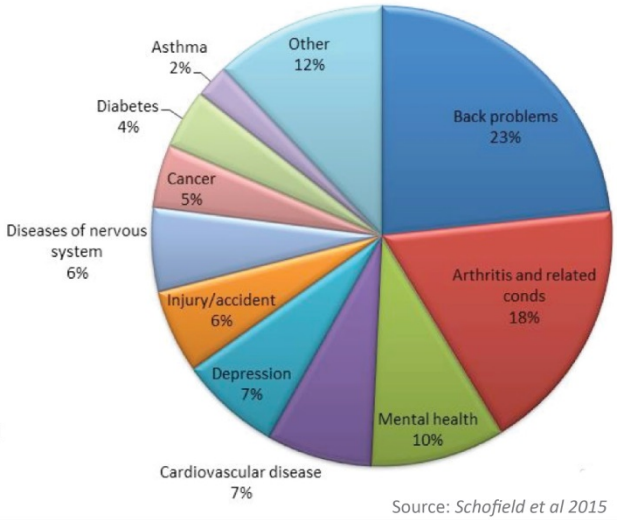
Source: *AIHW 2016 Burden of Disease Study*

Proportion of all disability by main disabling condition, Australia 2009



Source: *ABS Survey of Disability, Ageing and Carers, 2009*

Main chronic conditions of people aged 45-64 years not in the labour force due to ill health, 2010



Source: *Schofield et al 2015*

Overview

Arthritis exacts a significant burden on the Australian community. The impact of this condition includes pain and suffering, reduced quality of life and even reduced longevity, lost productivity and significant costs associated with ongoing care and management. People with the condition, their families, friends and carers are all affected in some way.

This national Action Plan provides a blueprint for national efforts to improve the health-related quality of life for people living with arthritis, reduce the cost and prevalence of those conditions, and reduce the impact on individuals, their carers and communities within Australia.

Vision

Freedom from the burden of arthritis

Priority Action Areas

1. Arthritis awareness, prevention and education.
2. High-value clinical management, care and support.
3. Quality improvement through investment in research and data.

The following table provides an overview of the actions proposed for each priority action area.

Priority 1- Arthritis awareness, prevention and education

1.1 Increase community awareness and understanding of arthritis, its risk factors and opportunities for prevention and improved management.	1.1.1 Develop, deliver and promote a range of education and awareness campaigns in priority areas tailored to different target audiences, using multiple platforms.
	1.1.2 Integrate arthritis into all health care policies, programs and reform initiatives across all levels of government in Australia.
1.2 Reduce arthritis risk.	1.2.1 Raise awareness of the link between obesity, physical inactivity, smoking and arthritis.
	1.2.2 Develop and implement a national sports injury prevention program to reduce the incidence of sports injuries associated with increased arthritis risk**.**
1.3 Empower people with arthritis with information, education and support to help them to self-manage their condition.	1.3.1 Integrate the provision of patient information, education and support into health service delivery for people with arthritis.
	1.3.2 Expand existing and develop and trial new information and support programs to assist people with arthritis to proactively manage their condition.
	1.3.3 Develop and promote new consumer information resources to address identified resource gaps and unmet needs.
	1.3.4 Develop and disseminate consumer-focused guides or standards of care for people with arthritis so they know what care they should receive.

Priority 2 - High-value clinical management, care and support.

2.1 Drive systems level improvements to support the delivery of high-value care for people with all types of arthritis	2.1.1 Establish and fund a National Musculoskeletal Network to engage with and align efforts across multiple stakeholders, sectors and levels of the health system to drive improvements in arthritis prevention and management.
	2.1.2 Support the development and implementation of evidence-based musculoskeletal models of care across Australia to guide the delivery of appropriate health services for people with arthritis.
	2.1.3 Trial and evaluate innovative models of care to assess their suitability for delivering better care for people with arthritis and to improve care coordination.
	2.1.4 Provide dedicated funding to PHNs to develop, deliver and commission programs to address the needs of people with arthritis in their area.
2.2 Improve affordable and timely access to appropriate health care and services.	2.2.1 Drive early diagnosis and intervention for children and adults with inflammatory arthritis.
	2.2.2 Improve access to affordable specialist rheumatology services, including rheumatologists, paediatric rheumatologists and appropriately skilled nurses and allied health professionals.
	2.2.3 Improve affordable access to interdisciplinary team care delivered by appropriately skilled nurses and allied health professionals.
	2.2.4 Increase the uptake of effective lifestyle and self-management interventions for people with arthritis.
	2.2.5 Improve equitable and timely access to appropriate surgical care for people with arthritis and improve surgical outcomes.
2.3 Support health professionals with information, education and support to deliver high-value arthritis care.	2.3.1 Establish and promote guidelines and systems to assist health professionals to provide high-value clinical care for people with different types of arthritis.
	2.3.2 Develop and deliver a national information, training and education framework to upskill health professionals and other potential workforce providers to deliver appropriate management and care for people with arthritis.
	2.3.3 Develop support tools and systems to assist health professionals to deliver appropriate care.
2.4 Address the needs of priority populations	2.4.1 Improve access to appropriate care for people in rural/remote and other underserviced areas by expanding specialist and interdisciplinary outreach clinics, with additional support through telemedicine services.
	2.4.2 Develop information resources and health services that are culturally appropriate and address the needs of ATSI, CALD groups and people with low health literacy.
	2.4.3 Ensure appropriate recognition of the impact of arthritis-related disability on people's lives and incomes in assessment processes for disability support services and welfare payments.

Priority 3 - Quality improvement through research, evidence and data

3.1 Provide funding from the MRFF for a national musculoskeletal health mission to increase strategic research and research capacity in the field	3.1.1 Establish and fund a virtual National Research Institute to drive the strategic expansion of research for arthritis and musculoskeletal conditions in Australia.
	3.1.2 Build the arthritis and musculoskeletal research workforce through dedicated funding for research fellowship programs.
	3.1.3 Foster collaborative research in the field of arthritis and musculoskeletal conditions.
	3.1.4 Fund high-quality research projects and infrastructure that will lead to improved prevention, diagnosis and treatment, and support the search for cures.
3.2 Enhance data collection, linkage and analysis to drive quality improvement in arthritis management and outcomes.	3.3.1 Fund the development and implementation of a national data strategy to provide a clearer picture of the prevalence, prevention, management, treatment and outcomes for arthritis and musculoskeletal conditions and to support benchmarking and quality improvement.
	3.3.2 Expand and enhance existing arthritis registries/databases
	3.3.3 Embed data collection into hospital and clinical management systems to capture and analyse treatment and outcomes data to inform clinical decisions and drive quality improvement.

PRIORITY ACTION AREAS

Priority 1 - Arthritis awareness, prevention and education.

Objectives:

- *Improved awareness and understanding of arthritis, its risk factors and opportunities for prevention and improved management.*
- *Reduced arthritis risk.*
- *People with arthritis and their families and carers receive timely information, education and support to become active participants in their health care and to help them to self-manage their condition at all stages.*

Although arthritis is very common, it is not well understood. Community misconceptions persist that arthritis is a single condition that only affects old people and that it is an inevitable part of ageing about which nothing can be done. These misconceptions create a sense of futility among consumers, carers and health professionals which can undermine prevention, early diagnosis and effective management.[12] Limited public awareness of rheumatoid arthritis for example has been identified as a major impediment to seeking early medical attention.[13] This is a particular concern because early diagnosis and treatment are critical to optimise long term outcomes for people with this condition.

There is also limited awareness of modifiable risk factors for arthritis including obesity, physical inactivity, poor diet, smoking and joint injuries. However, arthritis is rarely included in messaging around chronic disease prevention or healthy lifestyle promotion. In addition, there is limited awareness that sports injuries associated with increased arthritis risk can be reduced by implementing simple, low cost sports injury prevention programs.

Access to information, education and support from health professionals, carers and other sources is important to equip people with chronic conditions such as arthritis with the knowledge and skills to self-manage their condition and to participate in decisions about their care. It is also an important contributor to psychological wellbeing and an individual's ability to cope with their condition. People who report poor access to information and support are also more likely to report that they are faring badly with their arthritis. [14]

Education, information and support are required at all stages of the patient journey, but particularly at diagnosis and during a disease flare to assist people to actively manage their condition. People should receive information and education about their condition and treatments, likely prognosis/course of symptoms, medications, pain and pain management strategies, effective strategies for self-care including lifestyle changes such as weight loss where indicated and physical activity, and advice on reputable sources of evidence-based information.

Recommended Actions

1.1 Increase community awareness and understanding of arthritis, its risk factors and opportunities for prevention and improved management.		
Action	**Detail**	**Lead entities /partners**
1.1.1 Develop, deliver and promote a range of arthritis education and awareness campaigns in priority areas tailored to different target audiences, using multiple platforms.	Priority topic areas and target audiences for awareness campaigns include: • The importance of early diagnosis and treatment of inflammatory arthritis. *Target audiences:* general public, health professionals, PHNs. • The benefits of physical activity, exercise and weight loss for preventing and managing arthritis. *Target*	Arthritis Australia and Affiliates Health professional organisations and clinical bodies. Sporting

	audiences: people with or at risk of arthritis, health professionals. • Arthritis risk factors and prevention including obesity, physical inactivity, smoking and joint injuries. *Target audiences*: general public, policy makers, health professionals, PHNs, industry, healthy lifestyle program providers, sporting organisations and fitness centres and organisations active in chronic disease prevention. • The link between joint injuries and osteoarthritis and the effectiveness of sports injury prevention strategies. *Target audiences*: sporting organisations, schools, sports participants and the fitness industry. • Mythbusting – countering common myths about arthritis. *Target audience*: general public, health professionals, policy makers. Develop and deliver campaigns in partnership with consumers and other organisations where appropriate, such as chronic disease groups and relevant health professional associations. Include tailored components for specific populations developed in collaboration with representatives of the target audience/s, including culturally and linguistically diverse groups, Aboriginal and Torres Strait Islanders and people in rural and remote areas.	organisations Fitness and healthy lifestyle providers Private health insurers Primary Health Networks Pharmacists Multicultural and ATSI organisations.
1.1.2 Integrate arthritis into all health care policies, programs and reform initiatives across all levels of government in Australia.	Update existing or new chronic disease prevention and management policies, frameworks, programs and funding arrangements across all levels of government to explicitly include a focus on musculoskeletal health. Include arthritis messaging in government-run campaigns and programs promoting physical activity, healthy diets, weight management and smoking cessation. Explicitly address arthritis and musculoskeletal conditions in government health policies and programs such as the Women's Health Strategy and the Health Care Homes trial.	Australian and state and territory departments of health. PHNs NGOs
1.2 Reduce arthritis risk		
Action	**Detail**	**Lead entities /partners**
1.2.1 Raise awareness of the link between obesity, physical inactivity, smoking and arthritis.	Partner with organisations active in obesity prevention to highlight the link between obesity and the development and progression of arthritis and to advocate for the implementation of obesity prevention policies and programs at all levels of government, community and industry. Partner with organisations promoting physical activity to highlight the importance of physical activity for the prevention and management of arthritis, and to	Arthritis Australia and Affiliates

	develop, implement and advocate for policies, programs and infrastructure to encourage increased physical activity levels across the life course. Include a warning message about smoking increasing the risk of developing rheumatoid arthritis as one of the health warnings on tobacco products.	
1.2.2 Develop and implement a national sports injury prevention program to reduce the incidence of sports injuries associated with increased arthritis risk**.**	Task Sport Australia with the development and implementation of a national sports injury prevention program in collaboration with injury prevention researchers, sports and exercise health professionals, sporting bodies and organisations, schools and the fitness industry. Require government-supported sporting programs such as Sporting Schools to implement sports injury prevention programs as a condition for funding. Promote physical activity at every age to strengthen muscle, bone and joint health, to reduce the risk of injuries associated with increased arthritis risk.	
1.3 Empower people with arthritis with information, education and support to help them to self-manage their condition at all stages.		
Action	**Detail**	**Lead entities /partners**
1.3.1 Integrate the provision of patient, information, education and support into health service delivery for people with arthritis.	Develop a training and credentialing program for arthritis educators across a range of disciplines including nursing and allied health (similar to diabetes educators) to provide patient information, education, psychosocial support and care coordination (see 2.3). Provide funding for arthritis educators in the public sector and through MBS item numbers and private health insurance.	
1.3.2 Expand existing and develop and trial new information, education and support programs to assist people with arthritis to proactively manage their condition.	Develop, trial and evaluate arthritis-appropriate telephone coaching programs, for national roll-out (eg using the evidence-based COACH program). Programs should incorporate behavioural change strategies and should be developed and evaluated for different types of arthritis including osteoarthritis, inflammatory arthritis (including JIA) and gout. Contribute funding to accelerate the implementation and evaluation of an innovative comprehensive, digitally- enabled patient support program for people with inflammatory arthritis which is currently being developed by Arthritis Australia. Develop new and expand the reach of existing community education programs run by arthritis organisations, including delivery in rural areas. Develop and implement a formalised best-practice national peer support program for people with arthritis, based on the Peers for Progress model (endorsed by the	Arthritis Australia and Affiliates Multicultural organisations NACCHO Health professional organisations ADHA

	WHO). Expand the reach and coverage of JIA kids camps run by arthritis organisations, to allow more children to participate, to cater for different age groups, including young adults, and to deliver disease-specific camps for children/young adults with other rheumatic conditions. Expand and enhance the existing Arthritis Infoline support service to provide a more comprehensive, multi-format, nationally consistent information hub, supported by accredited healthcare professionals (eg nurses, allied health professionals). The new service would offer personalised email, telephone and online support (eg webchat) and a moderated community forum to meet increasing consumer demand for more varied and flexible modes of engagement and information delivery.	
1.3.3 Develop and promote new consumer information resources to address identified resource gaps and unmet needs.	Develop a comprehensive suite of health promotion resources with a focus on exercise-related resources and programs to support people with arthritis and health professionals to use exercise and physical activity to help manage arthritis. Expand existing and develop new CALD and ATSI resources, including video tutorials in different languages. These resources should be developed and promoted in partnership with relevant multicultural organisations, community groups and health services. Develop age- and developmentally-appropriate information and support resources for children and their families living with JIA, including resources suitable for pre-school, primary school and high-school age. Develop tailored information resources for different types of arthritis and disease stages (eg at diagnosis, during a flare), and for people of different ages and life stages such as family planning and transition to adult services for children with JIA. Build on the Arthritis Australia website to provide a central repository of information, resources and education programs for consumers and health professionals.	
1.3.4 Develop and disseminate consumer-focused guides or standards of care for people with arthritis so they know what care they should receive.	Care guides or standards should be based on the most up-to-date clinical practice guidelines which include diagnosis, comprehensive assessment and care planning, disease education and self-management strategies, pain management, medication, early treatment, management of established disease and surgery. The consumer fact sheet for the *Osteoarthritis of the Knee Clinical Care Standard* and the *eumusc.net* consumer standards of care could be used as a guide.	

Priority 2 - High-value clinical management, care and support.

Objectives:

- *Evidence based models of care for arthritis and pain management are implemented across Australia to ensure people with arthritis have equitable access to nationally consistent high-value care and support.*
- *Health services are adequately resourced and structured to support rapid access to affordable specialist care for those who need it.*
- *Children and adults with arthritis have affordable and timely access to appropriate, high-value management and care, including lifestyle interventions, interdisciplinary team care delivered by appropriately skilled nurses and allied health professionals, and surgery when required.*
- *Health professionals are skilled and supported with information, education and tools to deliver high-value arthritis care.*
- *Priority populations receive equitable access to information care and support that is timely and culturally appropriate.*

Evidence indicates that much needs to be done to improve the current management of arthritis in Australia, with two thirds of people with arthritis reporting that they are faring badly with their condition.[15] Common problems reported by people with arthritis include: limited services and inequitable access to publicly funded services; delays in diagnosis and treatment; limited access to interdisciplinary care; fragmented care; inadequate information and support for self-management; lack of psychosocial support and a high cost burden.[16]

Major evidence-practice gaps relating to the delivery of arthritis care in Australia include:

- inadequate management of osteoarthritis, with limited prescription of effective lifestyle interventions such as exercise and weight loss, and overreliance on medications and surgery[17] [18]
- delayed diagnosis and access to specialist care for children and people with inflammatory arthritis which is associated with poorer outcomes [19] [20]
- limited access to interdisciplinary team care, including pain management and psychological support
- poor utilisation of urate lowering therapy for gout[21] and
- lengthy waiting times for joint replacement surgery in the public sector[22] and significant levels of patient dissatisfaction following surgery [23] [24]
- limited access to specialist and interdisciplinary team care for people with arthritis in rural areas.

Models of care are evidence- and consultation-based frameworks that describe what and how health services and other resources should be delivered to people with specific health conditions. They provide an effective way to embed evidence into health policy and practice and achieve system efficiencies.[25] A number of models of care relating to musculoskeletal conditions have been developed in some jurisdictions using multidisciplinary health networks. Where evaluations or reviews are available, these models of care have been shown to have a positive or very positive impact on the quality of health care delivered and on community access to appropriate, timely care.[26] [27] For example, an evaluation of the Osteoarthritis Chronic Care Program in NSW, which provides holistic assessment and conservative management for people on the waiting list for joint replacement surgery, found that 11% of those awaiting knee replacement and 4% of those awaiting hip replacement came off the waiting list because they no longer required surgery.[28] This model of care, and others, are currently being rolled out across NSW.

There is scope to adapt and implement existing models of care more broadly across the country to support equitable access to evidence-based care for people with arthritis, as well as to develop new models of care to address significant evidence-practice gaps. The Network approach to developing and implementing models of care also provides a model for achieving system level improvements in arthritis care.

This Action Plan proposes the establishment of a National Musculoskeletal Alliance, based on the network concept that has been so effective at the jurisdictional level, to provide a strategic and coordinated approach to driving improvements in care nationally. A similar approach has also been effective in driving a whole-of-system approach to support the delivery of improved musculoskeletal prevention and care in

England.[29] The Alliance could be hosted by Arthritis Australia, with a focus on collaboration and inclusiveness.

Recommended Actions

2.1 Drive systems level improvements to support the delivery of high value care for people with all types of arthritis.		
Action	**Detail**	**Lead entities /partners**
2.1.1 Establish and fund a National Musculoskeletal Network to engage with and align efforts across multiple stakeholders, sectors and levels of the health system to drive improvements in arthritis prevention and management.	This Network would operate as a national version of the musculoskeletal clinical networks that have been established in some jurisdictions in Australia. These networks have enabled the development of a number of evidence-based musculoskeletal models of care which are at various stages of implementation in the relevant jurisdictions (see 3.1.2). Membership of the Network would include clinicians, researchers, consumers, policy makers and health service providers. The work of the Network would be managed by an Executive Committee supported by a network manager and working groups. The role of the Network would be to: • To galvanise and support partnerships across multiple sectors and levels of the health system and other stakeholders to work collaboratively to reduce the burden of musculoskeletal conditions. • To identify models of care and interventions suitable for national implementation, adapted to suit local circumstances and resources (see 2.1.2). • To define, prioritise and develop resources and projects to support the delivery of best-practice, high-value care. Establish formal musculoskeletal clinical networks supported by state and territory departments of health in jurisdictions which do not currently have these networks. The purpose of these networks is to develop and implement quality improvement initiatives that support high-value clinical care. Musculoskeletal clinical networks in WA and NSW have enabled the development of a number of models of care for musculoskeletal conditions which are at various stages of implementation in the relevant jurisdictions.	Australian and State and Territory Governments Arthritis Australia and Affiliates Health professional associations MSK Australia
2.1.2 Support the development and implementation of evidence-based musculoskeletal models of care across Australia to guide the delivery of appropriate health services for people with	Fund the state-wide implementation of evidence-based, jurisdictional models of care relevant to arthritis. A number of jurisdictions have developed models of care relevant to arthritis which are at various stages of implementation. In some cases, the models of care have been developed but funding for implementation is lacking or inadequate. • Victorian Model of Care for Osteoarthritis of the Hip	State and territory departments of health Local hospital districts Primary Health

arthritis.	and Knee (Vic) • Osteoarthritis Chronic Care Program (OACCP) (NSW) • Osteoarthritis Hip and Knee Service (Victoria) • Local Musculoskeletal Service (delivering OACCP and an Osteoporotic Re-fracture Prevention program in a community-based setting) (NSW) • Model of Care for the NSW Paediatric Rheumatology Network (NSW) • Elective Joint Replacement Service Model of Care (WA) • Inflammatory Arthritis Model of Care (WA) • WA Framework for Persistent Pain 2016-2021 • Service model for community-based musculoskeletal health in Western Australia • Musculoskeletal Triage and Assessment Service (Tasmania). Assess and adapt these existing models of care for implementation in jurisdictions which do not currently have models of care. Identify areas of need and develop and implement new evidence-based models of care to address them. This process could be driven by a National Musculoskeletal Network, as recommended in 2.1.1. Embed models of care in local information and care pathways such as HealthPathways.	Networks LHDs National Musculoskeletal Network
2.1.3 Trial and evaluate innovative models of care to assess their suitability for delivering better care for people with arthritis and to improve care coordination.	Pilot and evaluate a community-based, interdisciplinary arthritis clinic to provide a one-stop shop for diagnosis, assessment, triage, treatment and/or referral to other specialists and services. The clinic could be hosted or run by an arthritis consumer organisation, a community health centre, GP or specialist practice, or in partnership with one or more PHNs/LHDs. In collaboration with local hospital districts, PHNs and researchers, trial models for delivering specialist and interdisciplinary care within a primary care setting, such as the Inala Clinic model or the West Sydney Diabetes Alliance model. These models allow patients to access specialist care in their usual place of care, upskilling local primary care team members and supporting integrated patient-centred care. Trial and evaluate the effectiveness of shared medical appointments in both primary and secondary care to provide education and support for people with arthritis.	
2.1.4 Provide dedicated funding to PHNs to develop, deliver and commission programs to address the needs of people with arthritis in	This funding could be used to: • Assess the adequacy of local services and programs for people with arthritis and commission services to address shortfalls. • Develop locally tailored pathways of care for people	

their area.	with arthritis where these do not already exist (eg via HealthPathways). • Improve integration of care across primary, secondary and tertiary care services. • Trial innovative models of care and funding options to support affordable and equitable access to appropriate services.	
2.2 Improve affordable and timely access to appropriate, high-value management and care for children and adults with arthritis at every stage of their condition.		
Action	**Detail**	**Lead entities /partners**
2.2.1 Drive early diagnosis and intervention for children and adults with inflammatory arthritis.	Reduce waiting times for access to rheumatologists by increasing the rheumatology workforce (see 2.2.2) and adopting innovative care delivery models to streamline access to rheumatologists. Innovative care delivery models with a good evidence base include early arthritis clinics and the use of appropriately skilled nurses, allied health professionals or GPs to triage urgent cases and/or undertake less complex management tasks. Develop information and education materials, programs and tools for primary health care professionals to promote early diagnosis and intervention for inflammatory arthritis (see 2.3.2 and 2.3.3). Develop and implement a multi-component awareness and education campaign to increase knowledge of inflammatory arthritis symptoms and the importance of early diagnosis and rapid referral to specialist care targeting both consumers and health professionals.	
2.2.2 Improve access to affordable specialist rheumatology services, including rheumatologists, paediatric rheumatologists and appropriately skilled nurses and allied health professionals.	Undertake a workforce assessment and planning exercise to assess the adequacy of the current rheumatology workforce in both the public and private sector and to identify priority areas of unmet need. Expand funding for public rheumatology services in identified areas of need across Australia to reduce waiting lists and improve access to timely and affordable specialist and interdisciplinary services for children and adults with arthritis requiring specialist care. Increase funding for rheumatology training especially in areas of identified workforce shortfalls such as Queensland, Western Australia and rural areas. Provide funding through the Specialist Training Program to support rheumatology training in non-traditional settings such as non-tertiary hospitals and private practice. Target workforce capacity building for paediatric rheumatology services, where workforce shortages have been clearly identified, by providing dedicated funding for paediatric rheumatology training and expanding public funding for paediatric rheumatology nurse and allied	

	health positions. Fund rheumatology nurses to provide care and support for people with severe or inflammatory arthritis in both the public and the private sector: • Develop the business case for rheumatology nursing in both the public and the private sector. • Trial and evaluate a rheumatology nurse service offered through a PHN, LHD or community health service to provide services for people being managed in private practice (similar to the McGrath breast cancer nurse model). • Upskill nurses from other specialties (eg orthopaedics) in rheumatology • Extend the existing primary care practice nurse incentive and existing MBS item numbers to specialist nurses working in secondary care in the private sector.	
2.2.3 Improve affordable access to interdisciplinary team care delivered by appropriately skilled nurses and allied health professionals.	Develop funding models (public and private) to support affordable, evidence-based interdisciplinary packages of care for people with arthritis including exercise, weight loss, pain management and psychological health interventions, tailored to an individual's needs and preferences. Increase the number of allied health services available under the MBS Chronic Disease Management items. Based on the clinical judgement of the treating clinician people with arthritis who may benefit should be able to receive an additional five services per calendar year. Provide MBS funding for group allied health services, including assessment and review, for people with arthritis (as is currently available for people with type 2 diabetes). Develop pathways and certification processes for advanced practice nurses and allied health professionals with particular expertise and experience in managing arthritis. Support external recognition of specialisation within the wider community (eg the Australian Physiotherapy Association's Titling and Specialisation process) to assist health professionals and people with arthritis to identify appropriately skilled practitioners.	
2.2.4 Increase the uptake of effective lifestyle and self-management interventions for people with arthritis.	Support health professionals with training and tools to recommend and deliver evidence-based non-pharmacological, non-surgical interventions for people with arthritis, at all stages of their condition, including exercise, weight loss and other pain management strategies (see priority 2.3). Provide funding for people with arthritis to access arthritis-appropriate exercise programs, pain coping skills training and weight loss services. In conjunction with Arthritis Australia Affiliates, roll out the Joint Movement program to upskill exercise professionals	

	in the delivery of evidence-based arthritis-appropriate exercise programs where existing services are inadequate.	
2.2.5 Improve equitable and timely access to appropriate surgical care for people with arthritis and improve surgical outcomes.	Optimise non-surgical management for people with severe osteoarthritis considering surgery, including people on the joint replacement waiting list (see priorities 2.2.3, 2.2.4 and 2.3). Support informed decision-making processes for joint replacement surgery for both health professionals and people with severe osteoarthritis • Develop and promote an optimal decision aid and educational materials for people with osteoarthritis considering joint replacement surgery and embed these into clinical practice. • Establish state-wide databases to collect patient assessment and outcomes data relating to joint replacement surgery, to inform clinical decision making. Integrate these databases with population registries such as AOANJRR. Implement advanced scope physiotherapy-led clinics for orthopaedic triage and standard post-surgical reviews. Adapt and implement models of care, such as the WA Elective Joint Replacement Service Model of Care, to standardise and improve patient pathways from GP assessment through to rehabilitation and follow-up, to improve patient outcomes and the timeliness and efficiency of surgical care. Implement a consistent national post-operative pathway of care with an emphasis on discharge to the home environment where access to appropriate post-operative care services suitable for the patient are available. Develop, trial and evaluate community- or home-delivered post-operative rehabilitation options Provide private health insurance funding for community or home-based rehabilitation following joint replacement surgery.	
2.3 Support health professionals with information, education and support to deliver high-value arthritis care.		
Action	**Detail**	**Lead entities /partners**
2.3.1 Establish and promote guidelines and systems to assist health professionals to provide high-value clinical care for people with different types of arthritis	Promote the uptake of the recently revised *RACGP Guideline for the management of knee and hip osteoarthritis* as outlined in the communication, implementation and dissemination plan that accompanies the Guideline. Develop and disseminate a set of recommendations suitable for primary health professionals for best-practice diagnosis and early and ongoing management of	RACGP ARA ANZMUSC

	inflammatory arthritis, based on the latest national and international recommendations. Embed up-to-date information into clinical information systems and care pathways such as HealthPathways.	
2.3.2 Develop and deliver a national information, training and education framework to upskill health professionals and other potential workforce providers to deliver appropriate management and care for people with arthritis.	Establish an education advisory group to oversee the development and delivery of the national training and education framework, in collaboration with relevant professional bodies and educators. Tasks include: • Identify priority educational needs relating to arthritis care across clinical disciplines, including GPs, nurses, allied health professionals and pharmacists. • Review and enhance content relating to evidence-based arthritis management in curricula for GPs, nurses and allied health practitioners. • Define skill sets and competencies for components of arthritis management and care across clinical disciplines, care settings, and levels of professional practice. • Identify the education needs of specific groups of health professionals such as indigenous health workers and those working in rural and remote areas • Address the educational needs of other workforce providers including exercise, fitness and lifestyle professionals (eg arthritis-appropriate exercise) and aged care workers. • Consider credentialing, certification or recognition programs suitable for a range of health care professionals and other providers with a role to play in arthritis management • Acknowledge and build on, rather than duplicate, existing resources and programs such as the Course in Management of Musculoskeletal Conditions and the GLA:D Australia and RAPeL programs for training physiotherapists to deliver arthritis-appropriate care. Develop, promote and deliver educational resources and programs suitable for the target audiences in line with the framework and make them available in a range of formats including online modules, webinars or face-to-face sessions. Potential priority areas for consideration include: • Non-pharmacological, non-surgical management of osteoarthritis, targeting GPs, practice nurses, allied health professionals and pharmacists • Effective management of gout, targeting GPs, practice nurses and pharmacists • Early diagnosis and shared care for inflammatory arthritis, targeting GPs, nurses and pharmacists	Arthritis Australia and affiliates Health professional bodies Educators NPS MedicineWise Indigenous health groups Fitness and lifestyle professional groups.

	• Education programs suitable for health professionals living in or delivering outreach or telehealth services in rural areas (as outlined in 2.4 below) • Pain management, targeting GPs, nurses and pharmacists Establish an online hub to provide a central point of access to arthritis-related education and training resources.	
2.3.3 Develop support tools and systems to assist health professionals to deliver high-value care.	In collaboration with relevant professional bodies, develop a toolkit for GPs to support the delivery of best-practice arthritis care. Make the toolkit available in a range of formats and embed it into clinical practice software (eg *Pen CAT* or *Precedence*) and incorporate into local clinical pathways eg via HealthPathways. The toolkit would include: • A decision support tool to enhance early diagnosis and referral for children and adults who may require specialist care. This tool should include a guide to key clinical features suggesting inflammatory arthritis, clinical examination, an agreed set of laboratory tests to assist in diagnosis and a checklist of essential information to include in referral letters to rheumatologists to support triage. • Template management plans to assist in developing comprehensive care plans suitable for different types of arthritis, including shared care arrangements. Sample management plans should cover best-practice comprehensive patient assessment, diagnosis and care, patient education and self-management strategies, appropriate allied health services, medication and monitoring, management of co-morbidity risks (eg cardiovascular disease) and sources of additional consumer support and information (eg Arthritis Australia and Affiliates). • A decision aid for referral of people with osteoarthritis for joint replacement surgery. Identify (or develop) and promote simple screening tools or symptom checklists to assist primary care practitioners such as physiotherapists and pharmacists to identify people with possible inflammatory arthritis who should be referred to their GP.	
2.4 Address the needs of priority populations		
Action	**Detail**	**Lead entities /partners**
2.4.1 Improve access to appropriate care for people in rural/remote and other underserviced areas by expanding specialist and	Increase funding for both public and private rheumatology outreach and telehealth services into areas of identified need. Provide funding for outreach and telehealth services delivered by appropriately skilled nurses and allied health practitioners, to support team-based care, including	Australian and State and Territory governments Private health

interdisciplinary outreach clinics, with additional support through telemedicine services.	private health insurance rebates for allied health telehealth services. Integrate outreach services with local health care services, eg via co-location, to support continuity of care and to upskill local care providers. Establish new or promote existing models that enable internet and telephone delivery of exercise programs, health coaching for self-management and weight loss and pain management strategies. Upskill health professionals in rural and regional areas to provide appropriate care for people with arthritis. • Develop education and training resources for health professionals in rural and remote areas in specific knowledge and skills required to provide effective shared care. Deliver education using both content experts (clinical expertise) and context experts (experienced in delivering care in rural and remote areas) on an on-demand basis via online educational modules and webinars. • Provide telehealth training for participating health professionals to improve confidence in using the technology effectively for consultation and education purposes. • Implement cultural awareness training and best-practice protocols for health professionals delivering outreach/telemedicine services to ensure the care provided is culturally appropriate for the local community.	insurers ACRRM Health professional bodies NRHA
2.4.2 Develop information resources and health services that are culturally appropriate and address the needs of ATSI, CALD groups and people with low health literacy.	Collaborate with CALD and ATSI groups to identify information needs and develop appropriate resources suitable for these populations. Work with Aboriginal Medical Services to co-design health services for indigenous people with arthritis.	
2.4.3 Ensure appropriate recognition of the impact of arthritis-related disability on people's lives and incomes in assessment processes for disability support services and welfare payments.	Survey people with arthritis to identify the prevalence and impact on people's lives of issues relating to accessing disability support services (including NDIS) and welfare payments for people with arthritis-related disability. Develop a bespoke guide to disability support services for people with arthritis. Work with NDIA and Centrelink to review eligibility and assessment processes for disability support services and payments to ensure that arthritis-related disability is appropriately recognised.	
2.4.4 Develop and deliver	Develop and deliver arthritis-appropriate exercise	

services and programs to improve arthritis management in older people both in the community and in residential aged care.	programs suitable for older people (eg chair-based exercise programs) in both the community and residential aged care settings. The aim of these programs would be to help older people with arthritis to maintain their independence for longer, reduce the burden on informal carers, reduce premature admission to residential aged care facilities and delay requirements for higher level care.	

Priority 3 - Quality improvement through research, evidence and data

Objectives

- *Research funding and capacity for arthritis and musculoskeletal conditions is commensurate with the burden and cost of these conditions*
- *Research investment is guided by a strategic, priority-driven approach developed in consultation with the musculoskeletal research sector and collaborative research is fostered*
- *A national data strategy is implemented to enhance data collection, linkage and analysis and drive quality improvement in arthritis management and outcomes.*

Research and data are essential to improve our knowledge of arthritis and how to prevent, better manage and potentially cure the condition in its many forms

Research funding for arthritis and musculoskeletal conditions in Australia, however, is disproportionately low relative to the disease burden and cost of these conditions. These conditions account for 12% of the total disease burden[30] and nearly 9% of disease expenditure[31] yet receive only 3% of NHMRC funding allocated to National Health Priority Areas.[32]

Although Australia has world-leading researchers in the musculoskeletal field, research efforts to date have tended to be siloed and fragmented and lacking in strategic direction. Limited research capacity is also a major issue, driven mainly by ongoing low levels of funding.

There have been a number of recent developments aimed at improving clinical research quality and capacity and supporting strategic, collaborative research into arthritis and musculoskeletal conditions in Australia. These include:

- The establishment of the Australian Arthritis and Autoimmune Biobank Collaborative (A3BC) to support collaborative research into genomics and precision medicine for the prevention and treatment of autoimmune and other forms of arthritis. In addition to a national biobanking network, the A3BC will provide genomic data analysis, data linkage and big data modelling capabilities to identify factors and biomarkers related to the onset and progression of these conditions. The A3BC will integrate with the Australian Rheumatology Association Database (ARAD), a registry of patient reported outcomes, to link biospecimen data, patient data and data in other datasets through the ARAD data linkage capability.
- The establishment of the Australia and New Zealand Musculoskeletal Clinical Trials Network (ANZMUSC), which aims to improve clinical research quality and capacity. ANZMUSC is the first formally constituted clinical trials network for musculoskeletal conditions, though other less formalised networks exist.
- The establishment of three NHMRC Centres with a musculoskeletal focus.
- A number of National Osteoarthritis Summits have been held in recent years, to develop and refine research priorities for osteoarthritis and facilitate networking and collaboration.

However, dedicated funding is required to boost arthritis research capacity and build on these developments to accelerate the generation of new knowledge and its implementation into practice.

The MRFF provides an opportunity to provide strategic funding for boosting arthritis research, but no funds have yet been specifically been allocated to musculoskeletal health research

In other areas such as mental health and dementia, the Australian government has funded specific programs to boost research funding. The Boosting Dementia Research Initiative for example, provides $200 million over five years to boost Australia's dementia research capacity, while $125 million has been allocated to mental health from the Medical Research Future Fund (MRFF) under the Million Minds Mission.

Recommended Actions

3.1 Provide funding from the MRFF for a national musculoskeletal health mission to increase strategic research and research capacity in the field.		
Action	**Detail**	**Lead entities /partners**
3.1.1 Establish and fund a virtual National Research Institute to drive the strategic expansion of research for arthritis and musculoskeletal conditions in Australia.	The Research Institute would be charged with driving the strategic, priority-driven expansion of research in Australia, building research capacity, fostering collaboration across the research sector and supporting translation and implementation of research into clinical practice.	Research funding bodies and musculoskeletal health professional, research and consumer organisations.
3.1.2 Build the arthritis and musculoskeletal research workforce through dedicated funding for research fellowship programs.	Provide fellowship funding support for clinician researchers and for researchers at all career stages to attract and encourage retention of researchers in the field.	NHMRC MRFF Arthritis Australia ARA ANZMUSC
3.1.3 Foster collaborative research in the field of arthritis and musculoskeletal conditions.	Foster national clinician research networks to advance research into specific clinical topics or conditions. Foster collaborative, interdisciplinary research partnerships between universities, research organisations, health services and consumer groups. Fund Centres of Research Excellence in priority areas to promote the establishment of collaborative research partnerships.	
3.1.4 Fund high-quality research projects and infrastructure that will lead to improved prevention, diagnosis and treatment, and support the search for cures.	Release targeted calls for research in identified priority areas from the NHMRC and/or the MRFF. Provide co-funding for the Australian Arthritis and Autoimmune Biobanking Collaborative (A3BC) to support research into personalised medicine for people with a range of arthritis and autoimmune conditions. Include musculoskeletal conditions as a priority condition for funding under the MRFF Targeted Translation Research Accelerator program.	NHMRC MRFF ARA Arthritis Australia ANZMUSC

3.2 Enhance data collection, linkage and analysis to drive quality improvement in arthritis management and outcomes.		
Action	**Detail**	**Lead entities /partners**
3.3.1 Fund the development and implementation of a national data strategy to provide a clearer picture of the prevalence, prevention, management, treatment and outcomes for arthritis and musculoskeletal conditions and to support benchmarking and quality improvement.	Expand funding for the AIHW National Centre for Monitoring Arthritis and Musculoskeletal Conditions to undertake data linkage projects to better utilise existing data sources and develop new data collections to address existing data gaps. Develop and implement a national dataset to capture data on patient assessments, treatments and outcomes and support national benchmarking of the quality and effectiveness of management for these conditions. Incorporate additional arthritis-related questions into the national surveys such as the Australian Health Survey to capture to more accurately capture information on the prevalence of different types of arthritis and treatments and management of arthritis in the community. Develop and monitor a set of performance indicators and outcome measures for the prevention and management of musculoskeletal conditions, and for monitoring progress	
3.3.2 Expand and enhance existing arthritis registries/databases	Support current efforts to add clinical outcomes data to the Australian Orthopaedic Association National Joint Replacement Registry (this is already underway). Upgrade and expand the Australian Rheumatology Association Database (in conjunction with the development of the A3BC).	AOA ARA/ ARAD
3.3.3 Embed data collection into hospital and clinical management systems to capture and analyse treatment and outcomes data to inform clinical decisions and drive quality improvement.	Routinely collect patient-reported outcome measures. Adopt state/territory-wide, nationally interoperable applications for routinely collecting data on clinical assessment, outcomes and patient-reported measures relating to joint replacement surgery. Explore digitally enabled strategies to enhance data collection including self-management apps, tracking tools etc., and integrate them into clinical practice to enhance patient care.	State and territory departments of health ACSQHC

Priorities

(to be completed with input from the Steering Committee)

Achieving progress

Implementation of this Action Plan will require sustained and ongoing effort and collaboration across multiple stakeholders. In addition further work is required to develop the implementation details for the actions proposed in the Plan.

In order to achieve progress, it is proposed that the National Musculoskeletal Alliance recommended in this Action Plan be charged with driving and monitoring the implementation of the Plan's recommendations. This would include establishing priorities, identifying key implementation partners for each priority, developing implementation details and timelines, and identifying key performance indicators for monitoring progress in implementing the Action Plan.

Progress in implementing the Action Plan should be reviewed on an annual basis, with a major review at five years.

A wide range of indicators can be used to assess overall progress in delivering the Action Plan. Some proposed indicators include:

- Implementation of awareness raising campaigns and assessment of their impact
- Progress in implementing sports injury prevention programs
- Consumer access to and satisfaction with information and care (assessed via a survey)
- Consumer participation in support programs run by arthritis organisations
- Commitment to and progress in implementing musculoskeletal models of care in each jurisdiction
- Proportion of people with arthritis offered conservative therapy and adopting lifestyle measures to manage their conditions
- Waiting lists for access to public rheumatology services and joint replacement surgery
- Availability of outreach and telehealth services for people with arthritis in rural and underserviced areas
- Research funding levels
- Development and implementation of a data strategy.

Implementation plans for each priority action will also require specific indicators to be developed to assess progress.

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