



**ANZMUSC**

AUSTRALIA & NEW ZEALAND MUSCULOSKELETAL  
CLINICAL TRIALS NETWORK

NHMRC CENTRE OF RESEARCH EXCELLENCE

# The formation of the ANZMUSC Clinical Trials Network and lessons learned

Rachelle Buchbinder

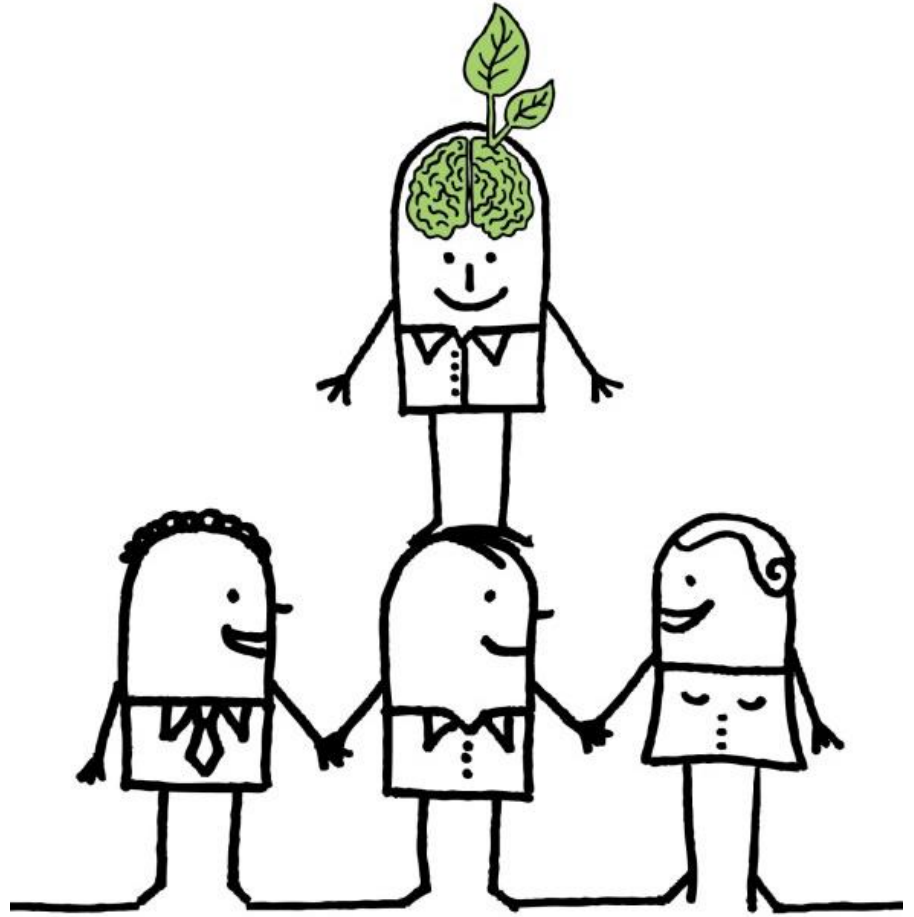
NHMRC Senior Principal Research Fellow

Director, Monash Dept Clinical Epidemiology, Cabrini Institute

Professor, Dept Epidemiology & Preventive Medicine, Monash University



# Disclosure



# How did we get here?

- Noted success of Australian networks, first ACTA summit 2014
- Serious plan started five years ago with a couple of informal meetings at the Australian Rheumatology Association ASM
- Scoping study funded by Arthritis Victoria (now MSK Australia)
- Formation of a steering committee, planning for national summit, website, logo
- Web-based survey - elicit interest and potential perceived benefits

# Burden of musculoskeletal disorders

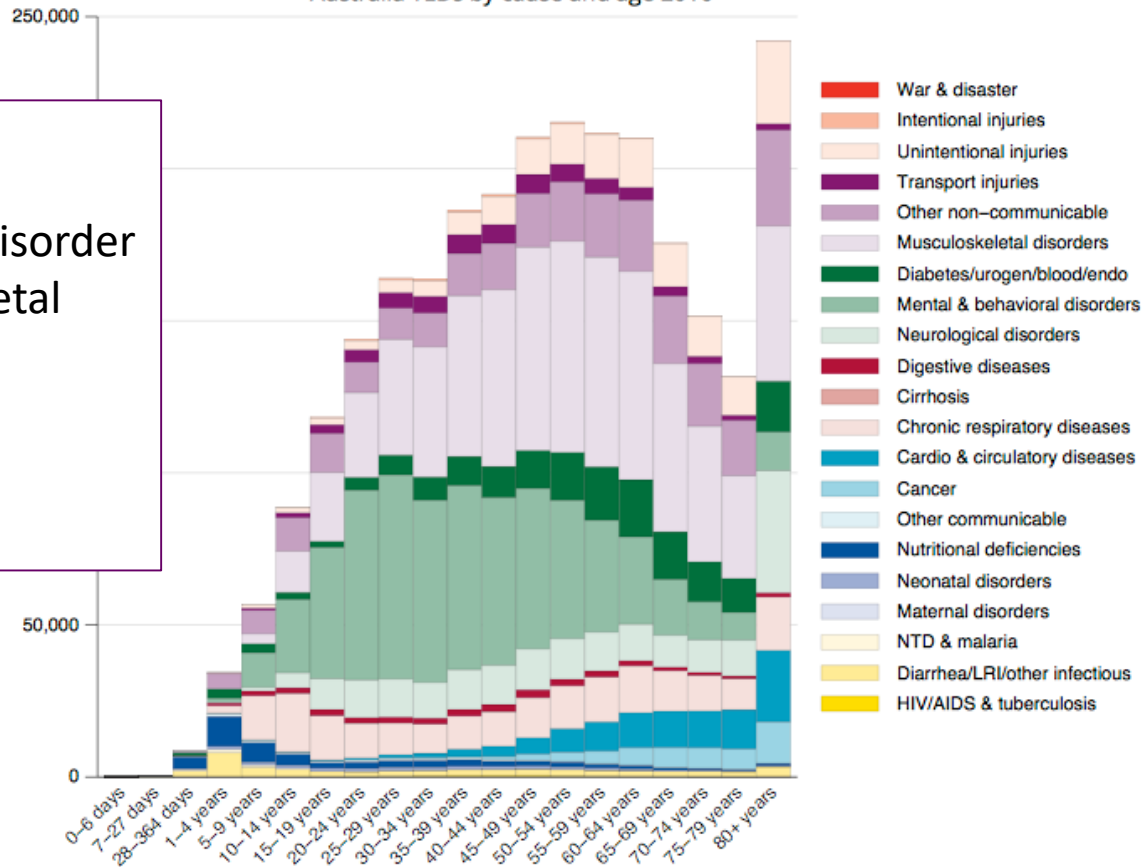
- 6.8% of total global burden of disease (both death and disability)
- 18.3% of years lived with disability
- Affects 28% (>6.1 million) Australians
- Second greatest impact after cancer

# Years Lived with Disability (YLDs) in Australia

Australia YLDs by cause and age 2010

## TOP FIVE

- 1 - Low back pain
  - 2 - Major depressive disorder
  - 3 - Other musculoskeletal
  - 4 - Neck pain
  - 5 - Falls
- 
- 11 - Osteoarthritis



# Mismatch between burden and research funding

- Worldwide, MSK conditions receive relatively **less** research focus compared to other less costly, less burdensome health conditions

Buchbinder R, Maher C, Harris I. Setting the research agenda for improving health care for musculoskeletal disorders. *Nat Rev Rheumatol* 2015; 1: 597-605.

# Evaluation of NHMRC funding 2010 to 2014

## **Annual investment**

- Arthritis ~\$25m vs \$110m cardiovascular, \$70m diabetes ~\$70 mental health

## **Number of submitted vs successful grants in 2014**

- Arthritis 159 submitted, 16% successful
- Cardiovascular 730 submitted, 18% successful
- Diabetes 409 submitted, 19% successful
- Mental health 504 submitted, 16% successful

In Australia and globally just as successful but reduced research capacity relative to other fields

# For debate

---

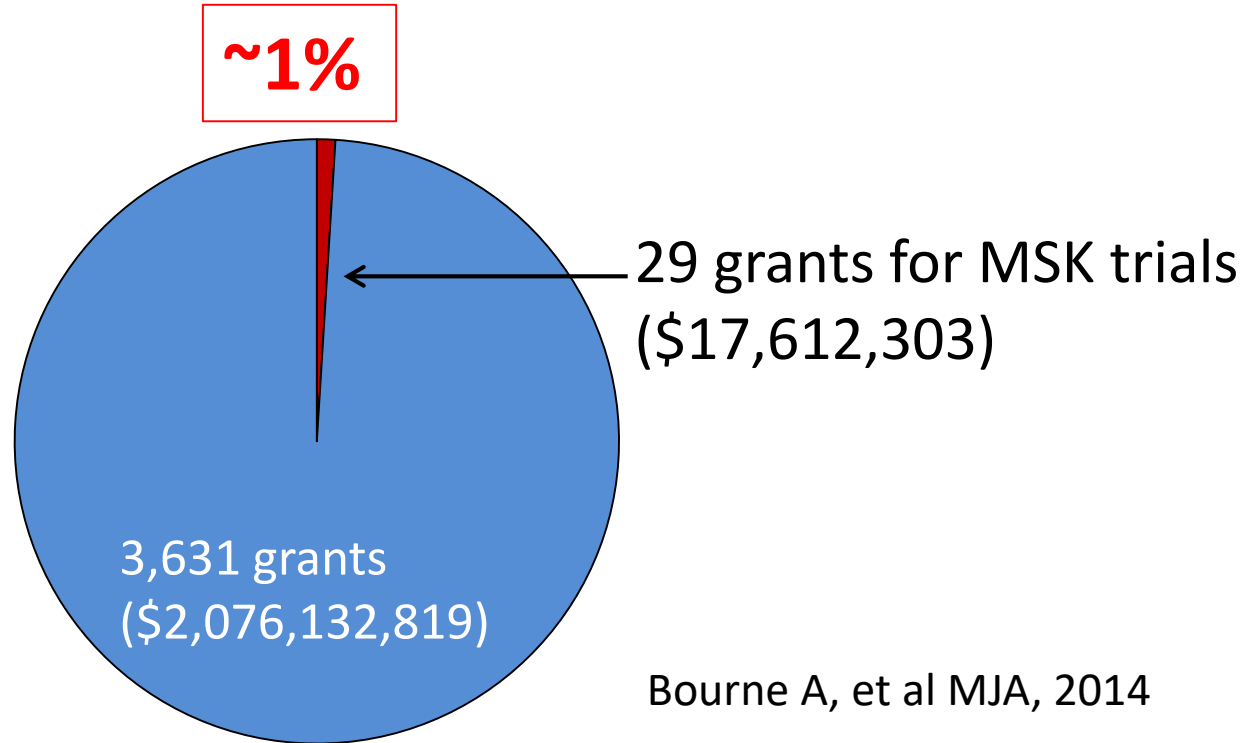
## The scope, funding and publication of musculoskeletal clinical trials performed in Australia

Bourne A, Whittle S, Richards B, Maher C, Buchbinder R. *MJA* 2014; 200;88-91.

- 29 NHMRC funded MSK RCTs 2009-13; ~ 5.8 per year
- 128 Australian-initiated registered trials 2011-12 (many small, may not be asking most important questions)
- ~1 in 20 (30/565) Australian investigator-initiated RCTs published in 37 leading journals 2011-12
- None were implementation trials

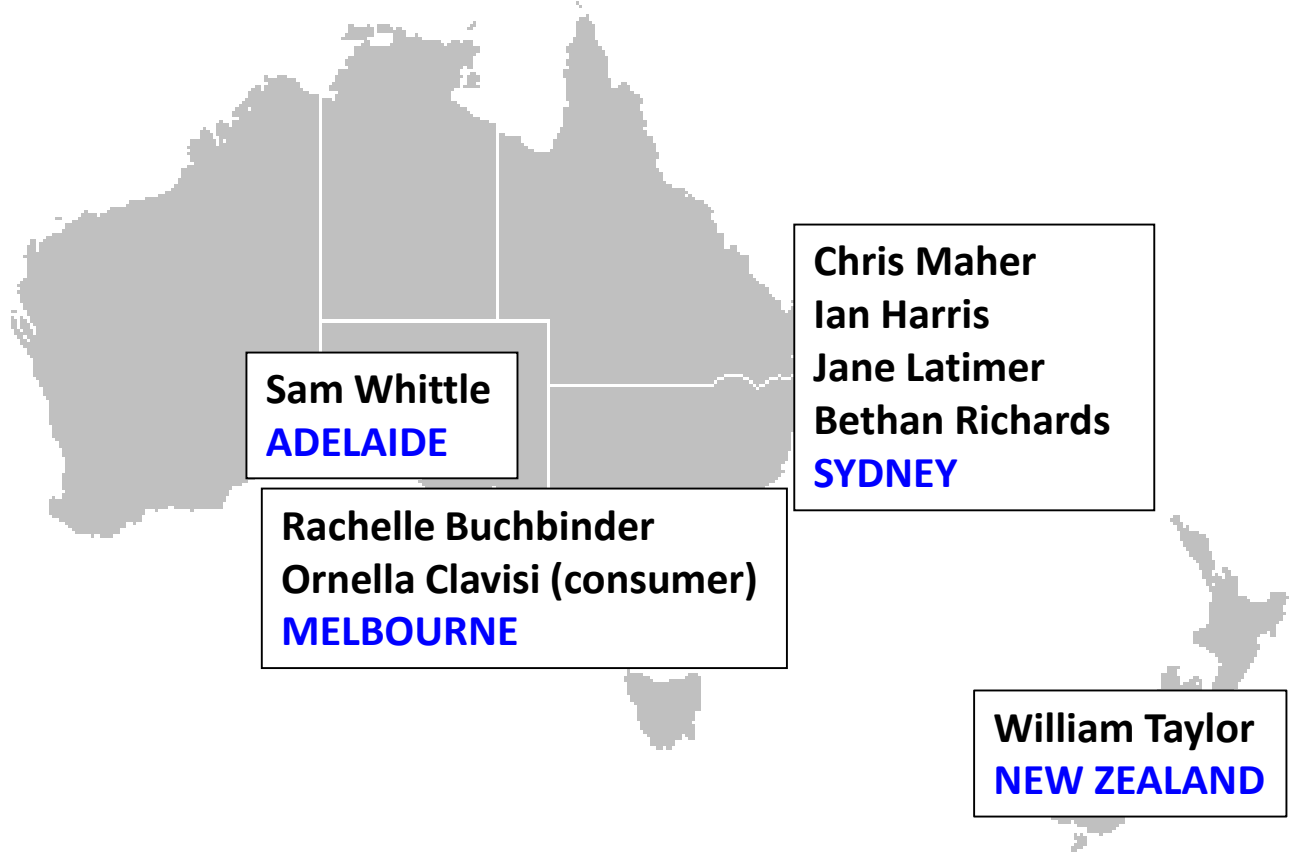


# Number (\$) of MSK clinical trials funded by NHMRC Project grants, 2009-2013



Bourne A, et al MJA, 2014

# ANZMUSC Steering Committee



# Inaugural summit April 2015, Melbourne

- Funded by professional societies, consumer organisations, Monash/Sydney Uni, Cabrini/George
- Invited trialists from scoping review list (100 participants)
- 2 facilitators (Profs John Zalcberg, Alan Silman)
- Why we need an MSK clinical trial network
- Day 1: hesitation, distrust, concerns
- By the end of Day 2: agreed vision, mission, values, one year goals

# The ANZMUSC Vision

---

To optimise musculoskeletal health through high quality, collaborative clinical research



# Mission

---

- To identify the key clinical research questions relevant to MSK health
- To improve the scientific quality of MSK research and its translation into policy and practice
- To facilitate and endorse clinical research based on scientific quality and potential to improve health outcomes
- Advocate for MSK research support
- Foster collaboration between research groups and stakeholders
- Advance the understanding of research through mentoring and education



# Why do we need a MSK clinical trials network?

- Current funding suboptimal and starkly disproportionate with the MSK global burden
- Current trials small and may not be focused upon the most important clinical questions
- >30 Australian collaborative clinical trial groups but none for musculoskeletal conditions
- Trial networks highly successful
- Collaborative network only viable and sustainable model

# Web survey

- 112 musculoskeletal trialists (invited 243, response rate 46%)
- All states and territories (except NT), 15% NZ
- 20 different disciplines
- 66% (74/112) interested in belonging to a network, 25% (28/112) undecided

# Potential benefits of network membership

## Six themes

1. Collaboration/networking
2. Funding
3. Learning/gaining experience/peer review
4. Priority-setting
5. Advocacy for musculoskeletal disease/research
6. Avoidance of duplication



## Partnering with ANZMUSC

We work closely with all our partners to help ensure your goals are achieved and to maximise the possibilities for positive exposure. We will tailor your partnership package to take into account your particular organisation's needs and wishes.

### Foundation partners (by invitation only)

Requires a 5 year commitment. Benefits for period of sponsorship will be in line with the financial contributions as per below.

### Principal partners

**AUD\$250,000 and above per annum  
(limited to three partners).**

#### Benefits for period of sponsorship:

- Opportunity to receive strategic advice from musculoskeletal opinion leaders
- Receive prominent logo placement on the top of key pages of the ANZMUSC website with click through to your organisation's website
- Access to a research expert which can offer advice (subsequent project work to be negotiated)
- Complimentary access to any password-protected training areas of the ANZMUSC website
- Two complimentary registrations for all workshops/ events conducted by ANZMUSC
- Acknowledgment of support in all ANZMUSC presentations
- Press release announcing support
- Annual progress reports for external and internal communications
- Invitation to attend an annual function and the opportunity to contribute to the strategic direction of ANZMUSC

### Major partners

**AUD\$100,000 – AUD \$249,999 per annum.**

#### Benefits for period of sponsorship:

- Receive logo acknowledgment on the sponsor page of the ANZMUSC website, with click-through to your organisation's website
- Complimentary access to any password-protected training areas of the ANZMUSC website
- Acknowledgment of support in all ANZMUSC presentations
- Press release announcing support
- Annual progress reports for external and internal communications
- Invitation to attend an annual function and the opportunity to contribute to the strategic direction of ANZMUSC

### Partner

**AUD\$20,000 – \$99,999 per annum.**

#### Benefits for period of sponsorship:

- Receive text acknowledgment on the supporters' page of the ANZMUSC website
- Complimentary access to the password-protected training areas of the ANZMUSC website



**Working together for better  
musculoskeletal health**



To discuss future opportunities, contact:  
**Professor Rachelle Buchbinder**  
Chair, ANZMUSC Caretaker Working Group,  
Suite 41, Cabrini Medical Centre  
183 Wattletree Road, Malvern, Vic 3144  
Telephone: +61 9509 4445

**PROPOSAL FOR THE  
ESTABLISHMENT AND SUPPORT  
OF ANZMUSC**

# ANZMUSC: working together to ensure the best musculoskeletal health for all

## Background

The Australian and New Zealand Musculoskeletal (ANZMUSC) Clinical Trials Network is the peak body for musculoskeletal clinical trial research in Australia and New Zealand. We are a multidisciplinary network of more than 100 clinician researchers with expertise in primary and specialist medical, surgical and allied professional care, and are actively engaged in clinical trials for various musculoskeletal conditions.

Our network includes global opinion leaders in areas such as back and neck pain, osteoarthritis, rheumatoid arthritis and gout.

## Our vision

To optimise musculoskeletal health through high quality, collaborative clinical research.

## What makes ANZMUSC special?

ANZMUSC is a highly regarded Australasian network that brings together leading researchers, clinicians, consumers and policy makers to address the most important questions in the musculoskeletal area. The work endorsed by the network will determine the future of musculoskeletal health.

## What will ANZMUSC do?

We will:

- Identify the most important questions
- Endorse and conduct clinical research of the highest quality
- Advocate for greater support of musculoskeletal research
- Foster research groups and stakeholders
- Advance understanding of research through mentoring and education

## Creating a partnership with ANZMUSC

ANZMUSC has the potential to be the leading musculoskeletal clinical trials network globally. Currently a number of its members are ranked first in the world for research in their respective disciplines. The research advice, support and education delivered by ANZMUSC will be world class.

Your role as our industry partner is critically important to the future of ANZMUSC. Your support will allow us to answer the most important research questions and ease the crippling pain and disability of those suffering musculoskeletal disease. It will enable us to educate future research leaders, advancing their understanding of the importance of the consumer voice and the necessity to impact practice and policy to create better musculoskeletal health for all.

## Why partner with ANZMUSC?

As an ANZMUSC partner you will demonstrate your support for high quality research and education in the musculoskeletal area. You will also benefit from:

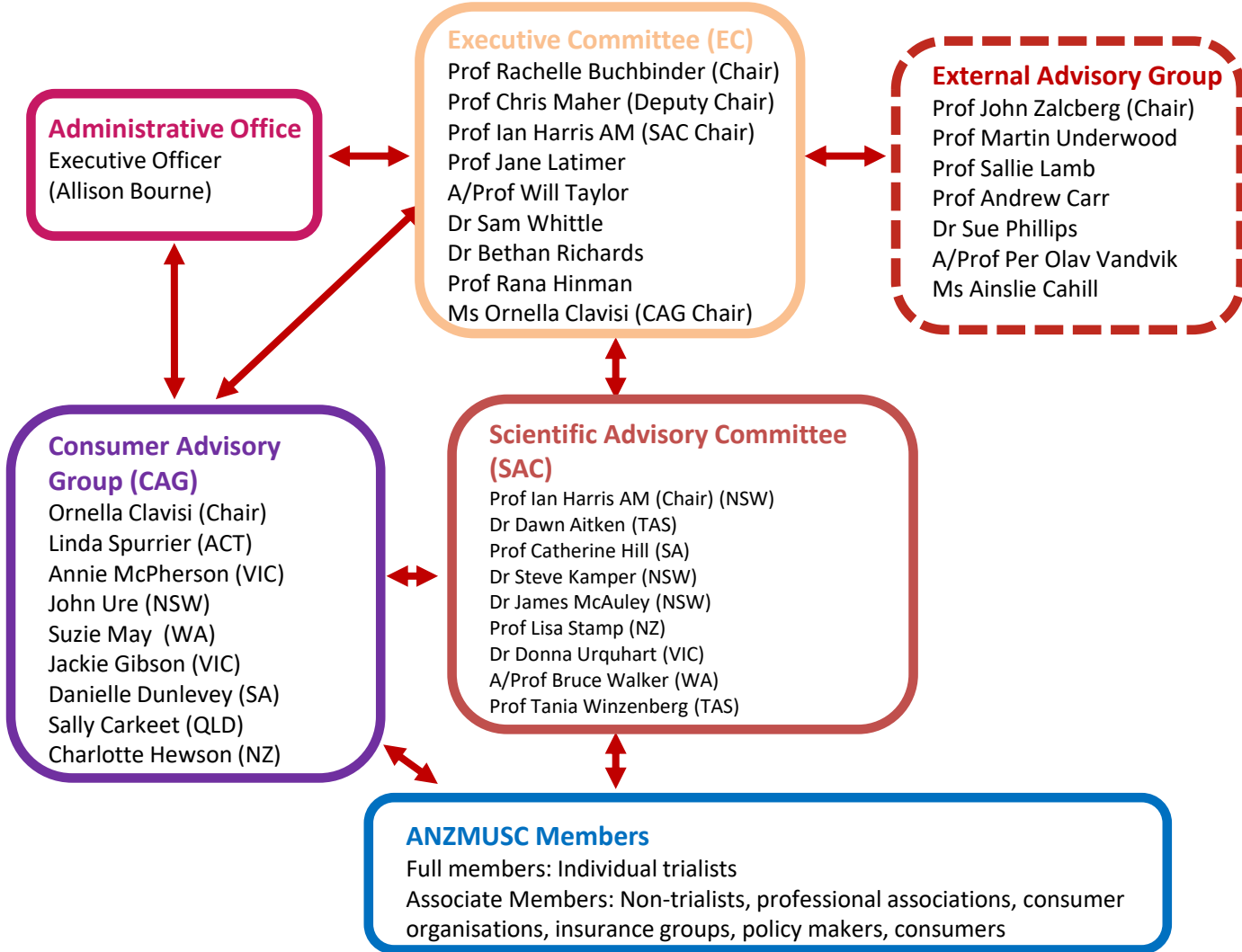
- Access to musculoskeletal opinion leaders for strategic advice
- Branding opportunities for your organisation on the ANZMUSC website
- Branding opportunities on ANZMUSC materials at all events
- Acknowledgement of support in a range of media, including in ANZMUSC presentations
- Complimentary attendance at workshops and events facilitated by ANZMUSC
- Press release announcing support
- The ability to demonstrate to your constituency that you value best practice care



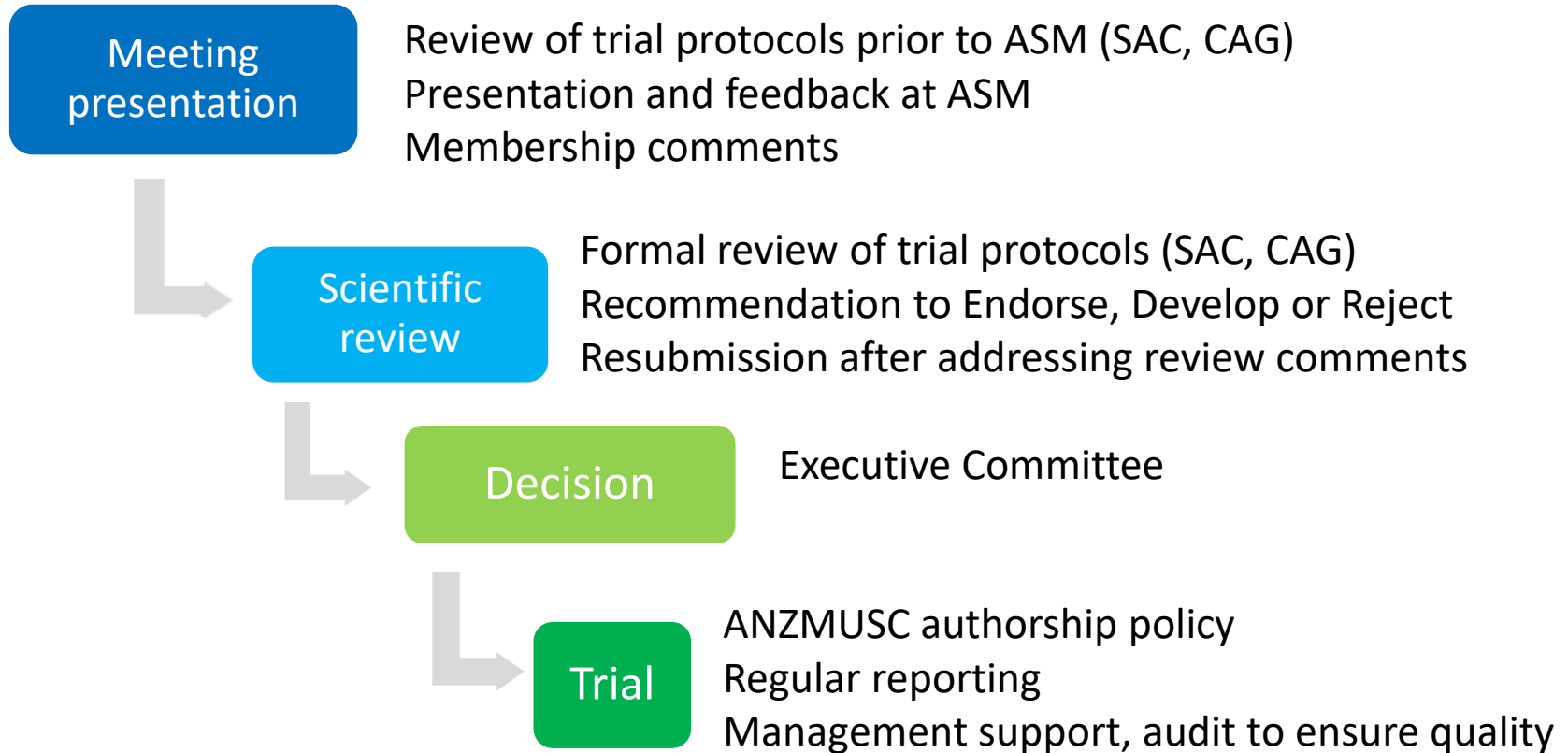
Secure industry  
funding

Support for  
quality research

Improved musculoskeletal  
health



# ANZMUSC Endorsement Process



# NHMRC Centre for Research Excellence, 2018-2022

## Chief Investigators

Rachelle Buchbinder

Chris Maher

Lyn March

Richard Day

Rana Hinman

Ian Harris

Manuela Ferreira

Paul Glasziou

Sally Green

Laurent Billot

## Associate Investigators

Anthony Harris

Catherine Hill

Chung-Wei Christine Lin

David Hunter

Flavia Cicuttini

James McAuley

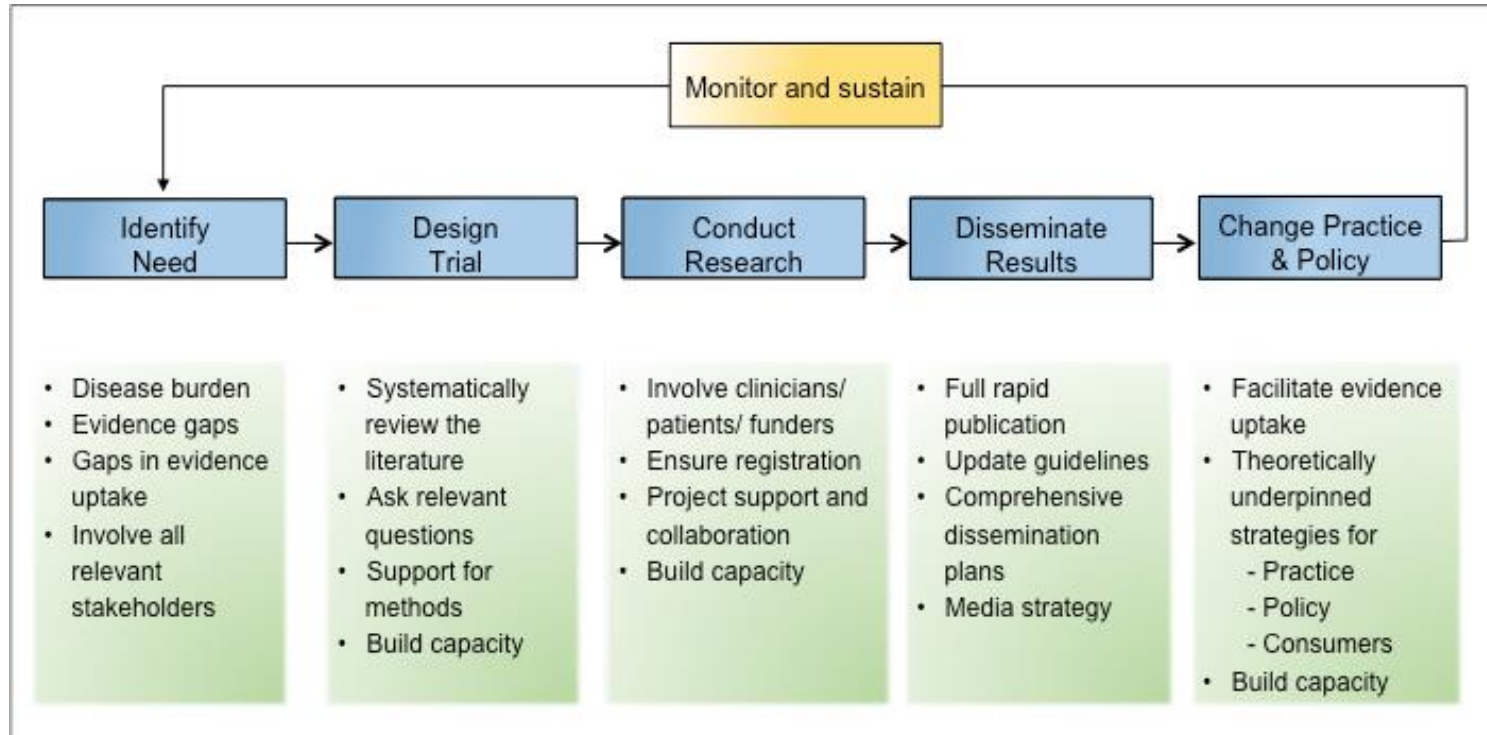
Jane Latimer

Samuel Whittle

Tania Winzenberg

William Taylor

# Overarching model underpinning ANZMUSC



Buchbinder R, Maher C, Harris I. Setting the research agenda for improving health care for musculoskeletal disorders. *Nat Rev Rheumatol* 2015; 1: 597-605.

# Development of a multi-attribute tool for setting priorities for trials in the musculoskeletal field

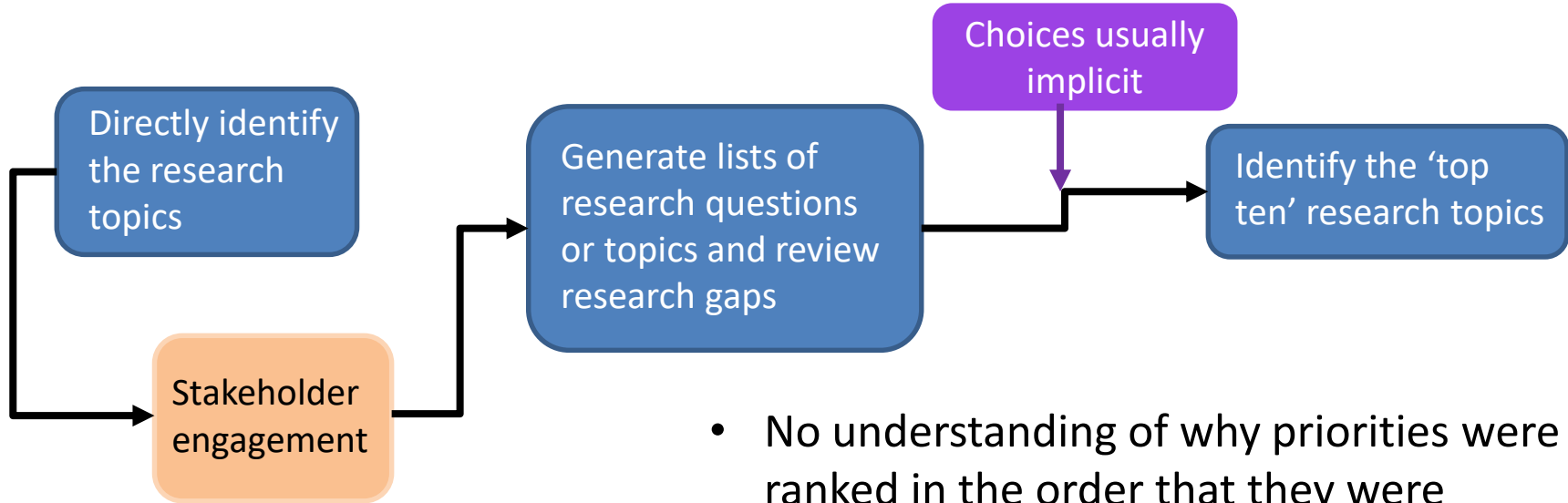


**ANZMUSC**  
AUSTRALIA & NEW ZEALAND MUSCULOSKELETAL  
CLINICAL TRIALS NETWORK  
NHMRC CENTRE OF RESEARCH EXCELLENCE





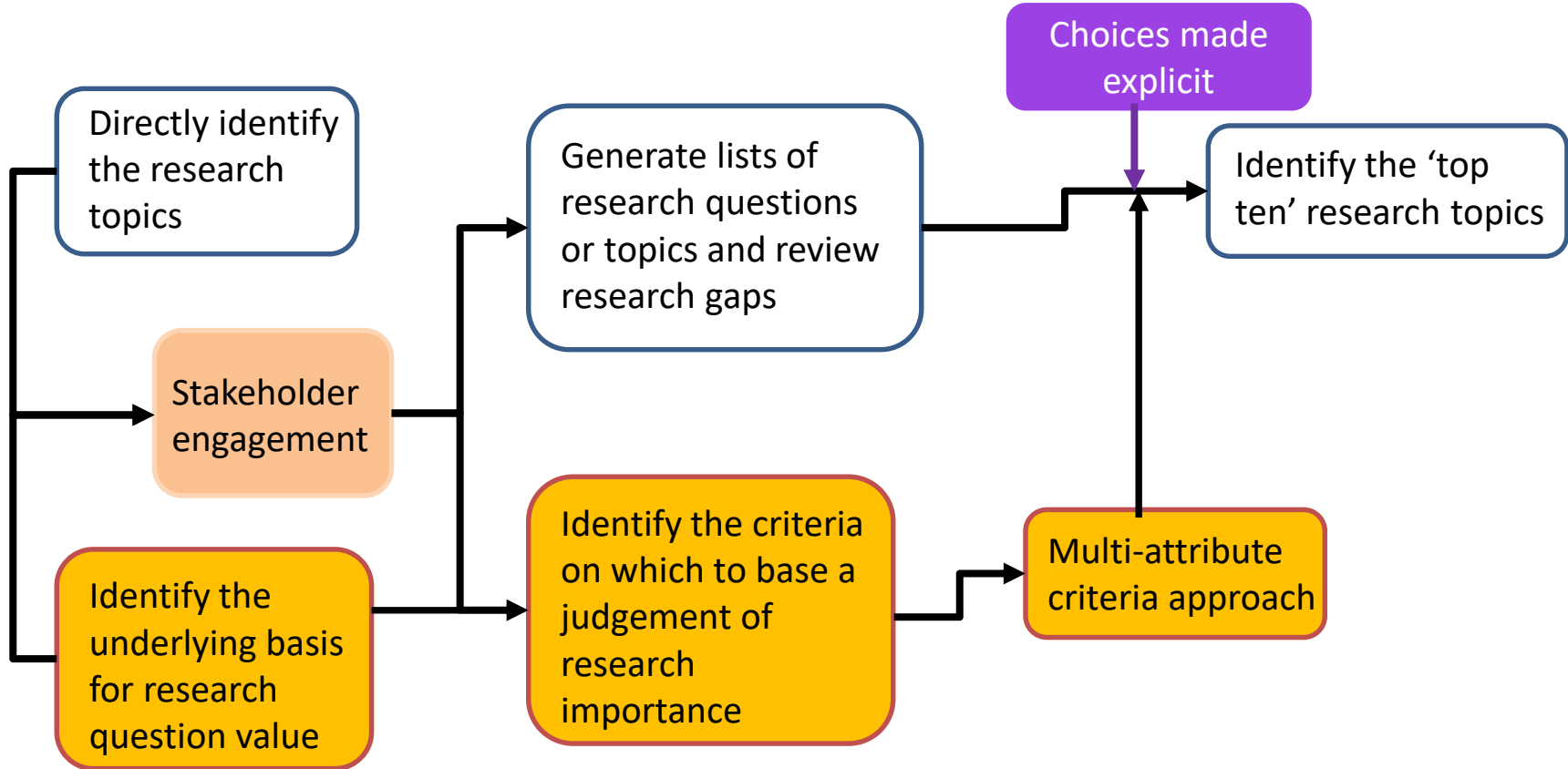
# Typical approach to research prioritisation



- No understanding of why priorities were ranked in the order that they were
- Participant bias
- Need to repeat the process when new topics arise



# Another approach



# Develop living systematic reviews and guidelines

- ANZMUSC Practitioner Fellow: Dr Sam Whittle appointed July 2018
- Cochrane Living Systematic Reviews and Therapeutic Guidelines PL

## Platelet rich plasma and other autologous blood product injections for osteoarthritis of the knee

### ▢ Protocol information

Review number: A136-P

### ▢ Authors

Renea V Johnston<sup>1</sup>, Samuel L Whittle<sup>2</sup>, Steve McDonald<sup>3</sup>, Kade L Paterson<sup>4</sup>, Rachelle Buchbinder<sup>5</sup>

- Stem cell therapy for osteoarthritis of the knee
- Arthroscopic surgery for degenerative knee disease (osteoarthritis including degenerative meniscal tears)

# Training, capacity building, mentoring

- PhDs, postdocs, practitioner fellowships
- Seeding grants open to all ANZMUSC members
  - 4 awarded this year
- Advice, protocol development, auditing, governance assistance
- PhD scholarships including 2 externally funded
  - COCA, Medibank Private

# Progress over 5 years

- >230 members, >30 disciplines, consumers actively involved
- 4 annual national 2-day summits (2016 Sydney, 2017 Adelaide, 2015, 18 Melbourne), half-yearly update meetings
- NHMRC Centre for Research Excellence, 2018-2022, launched by Hon Greg Hunt
- 6 ANZMUSC endorsed trials
- 3 NHMRC-funded ANZMUSC-endorsed trials (1 funded in 2017, 2 in 2018)
- 1st NHMRC-MRFF funded trial
- 1st ANZMUSC-endorsed trial protocol published
- Early development of ANZMUSC paper, submitted for publication
- Scoping review of musculoskeletal trial priority-setting projects, in press *BMJ Open*

# What have we learned?

- Start slowly and bring stakeholders with you – need time to build trust
- Involve stakeholders including consumers from the outset
- Professional societies supportive
- ACTA and other networks hugely helpful
- Multidisciplinary, multiple settings so not under a single organisation
- Be transparent and open
- Communicate frequently
- Many hands makes light work
- No harm in asking

# Acknowledgements



Australian Government

National Health and Medical Research Council



[anzmusc.org](http://anzmusc.org)

[admin@anzmusc.org](mailto:admin@anzmusc.org)

[rachelle.buchbinder@monash.edu](mailto:rachelle.buchbinder@monash.edu)



**ANZMUSC**  
AUSTRALIA & NEW ZEALAND MUSCULOSKELETAL  
CLINICAL TRIALS NETWORK  
NHMRC CENTRE OF RESEARCH EXCELLENCE





# Values

- Visionary
- Altruistic (generous, benevolent)
- Scientific integrity
- Transparency
- Equity
- Mutual respect
- Health consumer centred
- Ethical

# Member disciplines

