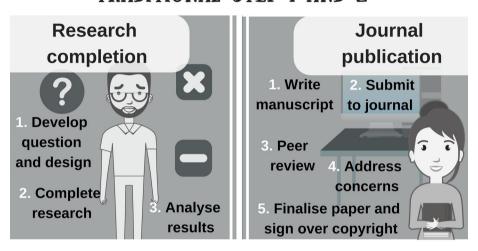
# Infographics and digital resources: an international consensus on golf and health

Andrew D Murray, <sup>1,2</sup> Christian J Barton, <sup>3,4</sup> Daryll Archibald, <sup>5,6</sup> Danny Glover, <sup>7</sup> Iain Robert Murray, <sup>8,9</sup> Kevin Barker, <sup>10</sup> Roger A Hawkes <sup>11,12</sup>



## TRADITIONAL STEP 1 AND 2



## NOVEL STEP 3 AND 4

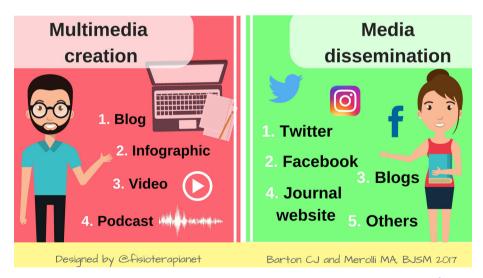


Figure 1 Visual representation of a process to improve knowledge translation based on Barton and Merolli's model.<sup>2</sup>

#### **INTRODUCTION**

New knowledge from research findings rarely produces rapid efficient changes in practice. Barton and Merolli<sup>2</sup> proposed a model which may help improve knowledge translation via the addition of two novel contemporary steps: multimedia

creation and subsequent dissemination (see figure 1).

Following this model, we recently produced digital/multimedia resources to help communicate and disseminate the International Consensus on Golf and Health.<sup>3</sup>

## RESEARCH COMPLETION AND PUBLICATION

A systematic literature review and modified Delphi process underpinned the International Consensus on Golf and Health and this was published in the *British Journal of Sports Medicine* in 2018.<sup>3</sup> The





## **Infographics**

Consensus is intended to support (1) golfers and potential golfers; (2) golf facilities and the golf industry; and (3) policy makers to make evidence-informed decisions that can maximise the health benefits of golf and minimise the health risks associated with this sport.

#### **MULTIMEDIA CREATION**

Articles containing visual information are read three times more often than those without.<sup>4</sup> Humans remember up to 6.5

times more through learning from visual imagery than by reading text alone.<sup>5</sup> This makes sense. How many text-only adverts do you see? What is your reaction to a wordy PowerPoint presentation? We produced bite-sized resources (infographics, podcasts and video content) with the key messages stemming from the consensus statement.<sup>3</sup>

Infographics have been made to support end-user groups: (1) golf players/potential players; (2) the golf industry/facilities; and

(ii) policy makers external to golf. These visual resources highlight the specific actions that can lead to the biggest gains in health and well-being related to golf (see figures 2–4). They complement published infographics regarding golf and health<sup>6</sup> and maximising golf performance.<sup>7</sup>

Video content was designed to have broad interest. We featured leading players who had won multiple major championships as well as researchers, clinicians and public health ministers. These are available

# PLAYING GOLF CAN MAKE YOU HEALTHIER & HAPPIER



Figure 2 Infographic. Tips to maximise health benefits of golf for golfers.

# WHAT CAN THE GOLF INDUSTRY/FACILITIES DO TO MAXIMISE THE HEALTH BENEFITS OF GOLF?



Figure 3 Infographic. What can the golf industry/golf facilities do to maximise the health benefits of golf?.

at www.golfandhealth.org. A podcast with more detail discussing the International Consensus on Golf on Health is available at https://soundcloud.com/bmjpodcasts/sets/bjsm-1. It offers researchers and others interested a 'deeper dive' into the methods and findings.

## DISSEMINATION AND COMMUNICATION

Infographics and other multimedia/digital resources facilitate the sharing of key messages and engagement with research.

They are not a substitute for reading the detailed peer reviewed article. Strategies<sup>8</sup> for sharing content can include:

- social media platforms (eg, via Twitter, Facebook, Instagram and blogs)
- email, plus or minus press release distribution
- direct communications including discussions, meetings and presentations targeting relevant stakeholders.

We used these strategies to share our previous scoping review on golf and

health.<sup>9</sup> This approach to sharing new research may have contributed to this manuscript being the subject of over 90 press articles, a supportive Early Day Motion in the UK parliament and achieving an Altmetric score >1300.

## CONCLUSION

Barton and Merolli's model offer researchers strategies to increase the visibility of their work. After conducting an International Consensus on Golf and Health and publishing it in the BJSM, we

#### Golf & Health- key actions for policy/decision makers Golf can provide health enhancing physical activity to persons of all ages, and The benefits of regular physical activity should be genders. Policy documents, communicated and promoted frameworks and regularly for persons of all ages. actions should support this. genders, and socio-economic backgrounds. Policy makers should where relevant, include golf as a moderate intensity physical Policy should support activity in policy documents, play by diverse guidance and geographical, and recommendations socio-economic participants, of all genders, ages and abilities Policy makers should work collaboratively with the golf industry and national associations to promote increased participation in physical activity/ golf, particularly in groups with low levels of physical Policies should promote multi-functionality activity. (having facilities in addition to golf), diversity of facilities where possible, and sustainable practices Policy documents, frameworks and Cross -sectoral policies involving golf actions can where relevant usefully can be acknowledge green space, health and delivered that support the World Health well-being, nature connection, social Organisation Global Action Plan on and Physical Activity, and the United Nations community, as well as economic Sustainable Development Goals. benefits of golf. INTERNATIONAL CONSENSUS ON GOLF & HEALTH BJSM 2018 Golf & Health Infographic by: Dr Danny Glover & Dr Andrew Murray 2018

Figure 4 Infographic. Golf and Health: key actions for policy/decision makers.

shared bite-sized multimedia resources to assist the dissemination and communication of the consensus. The BJSM is well positioned to support researchers who wish to produce similar digital resources. Options include, but are not limited to, co-producing podcast and blog content, and sharing purpose-created digital resources via popular Twitter, Facebook, Instagram and YouTube platforms.

<sup>1</sup>Sport and Exercise, Physical Activity for Health Research Centre, University of Edinburgh, Edinburgh, UK

<sup>2</sup>European Tour Golf, Edinburgh, UK
<sup>3</sup>Sport and Exercise Medicine Research Centre, La Trobe
University, Bundoora, Victoria, Australia
<sup>4</sup>Complete Sports Care, Hawthorn, Victoria, Australia
<sup>5</sup>School of Psychology and Public health, La Trobe
University, Melbourne, Victoria, Australia
<sup>6</sup>Scottish Collaboration for Public Health Research,
University of Edinburgh, Edinburgh, UK
<sup>7</sup>Health Education Yorkshire and the Humber, Leeds, UK

<sup>8</sup>Department of Trauma and Orthopaedics, The University of Edinburgh, Edinburgh, UK <sup>9</sup>Orthopaedic Hospital Research Center, University of California, Los Angeles, Los Angeles, California, USA <sup>10</sup>Golf Development, The R&A, St Andrews, UK

<sup>11</sup>Golf and Health, World Golf Foundation, St Augustine, Florida, USA

<sup>12</sup>European Disabled Golf Association, Birmingham, UK

**Correspondence to** Dr Andrew D Murray, Sport and Exercise, Physical Activity for Health Research Centre, University of Edinburgh, Edinburgh EH1 3DG, UK; docandrewmurray@gmail.com

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## **BRITISH JOURNAL OF SPORTS MEDICINE**

## Too many people missing out on health benefits of golf, says expert panel

Evidence suggests it may not only be good for mind and body, but also for a long life

Too many people are missing out on the health benefits of golf, says a panel of international experts in a consensus statement, which aims to widen participation in the sport.

The evidence suggests it may not only be good for mind and body, but also for a long life, says the statement, published online in the *British Journal of Sports Medicine*.

The consensus—one of the first of its kind—comes on the eve of the Ryder Cup, the biennial golf tournament between Europe and the US.

Amid a growing body of evidence on the health impacts of the sport, the consensus aims to help current and would-be players maximise the health pros and minimise the health cons of golf, and to guide policy-makers and industry leaders on how best to make golf more inclusive and accessible and so encourage more people from all walks of life to take up the sport.

The statement draws on a systematic review of the available published evidence (342 eligible studies) and discussions among an international working group of 25 experts in public health and health policy, and industry leaders.

Agreement was reached on 79 statements in three areas. These set out what is currently known about golf's associations with health; the factors that may help or hinder take-up of the sport; and a series of recommendations for golfers, industry leaders, and policy makers on how best to maximise its health benefits, promote sustainability, and widen participation.

The evidence shows that playing golf regularly is associated with longevity and reducing the risk factors for heart disease/stroke. And it can boost older people's strength and balance.

The sport is also associated with good mental health and improving the overall health of those with disabilities.

Compared with other sports, the risk of injury is moderate, but as it's an outdoor activity, golfers may be more at risk of skin cancer.

Golf is sociable, and gets people outdoors, connecting with nature. It can provide moderate intensity aerobic physical activity, and its health benefits are greatest for players (and spectators) who walk round the course rather than opt for a golf cart.

While around 60 million people play golf at least twice every year, the participant profile is quite narrow: players tend to be middle aged to older, male, of white European heritage, relatively well off, and living in North America, Europe, and Australasia.

And the sport is often perceived as expensive, male dominated, difficult to learn, and not a game for the young or those on the lower rungs of the social ladder.

This can put people off, says the statement. The sport needs to be more inclusive and welcoming of people from all walks of life and ethnic backgrounds, and any such initiatives should be supported, it says.

More people might be keen to take it up if golf were promoted as an enjoyable, lifelong outdoors activity that affords a sense of community and competitive challenge while providing some 'me time' as well as helping to fulfil recommended exercise quotas, says the statement.

And the sport can do its bit for sustainability by "practices that prioritise diversity, healthy societies, connection with, and care of, the environment, environmental integrity and health and wellbeing," the statement suggests.

Among its raft of recommendations, the consensus statement says that: *Golfers* 

- Should aim to play for 150 minutes/week, or do less, but couple golf with other physical activity, and walk the course rather than ride a golf cart
- Do warm-up/strengthening exercises to cut the risk of injury and use sun-cream and wear collared shirts/blouses to minimise the risk of skin cancer
- Make everyone feel welcome

## Clubs/Industry should:

- Build on existing initiatives to promote inclusivity and develop environments and price structures that will be attractive to everyone
- Develop a culture that will inspire more women and girls to play golf
- Make every effort to promote equality and diversity, and boost accessibility
- Promote sustainability through wildlife conservation and by restricting the use of water, energy, and pesticides
- Provide additional facilities at clubs, such as a gym, walking routes, crèches and improve the focus on health and safety, with the provision of healthy foods, defibrillators, and speed limiters on golf carts, for example

## Policy makers should:

- Promote the benefits of regular physical activity, including golf, for people of all ages, genders, and income brackets
- Promote the specific health enhancing aspects of golf Support diversity, equality, and sustainability
- Work with industry and national associations to boost take up of the sport, particularly in groups where physical activity levels are low
- Work with industry and regulatory bodies to get golf included in the Paralympics

"These outputs, if widely shared and adopted, will contribute to an improved understanding of golf and health, and aid these groups in making evidence-informed decisions and to improve health and wellbeing," the consensus statement concludes.

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