Infographics and digital resources

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

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INTRODUCTION
New knowledge from research findings rarely produces rapid efficient changes in practice.1 Barton and Merolli2 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.3

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 2018.2 The

Figure 1  Visual representation of a process to improve knowledge translation based on Barton and Merolli’s model2


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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. Humans remember up to 6.5 times more through learning from visual imagery than by reading text alone. 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.

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 and maximising golf performance. 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 online.

**PLAYING GOLF CAN MAKE YOU HEALTHIER & HAPPIER**

**HERE’S ARE SOME TOP TIPS TO MAXIMISE THESE BENEFITS**

**PLAY REGULARLY**
Aim to play golf or other physical activities at least 150 minutes per week, helping you meet global exercise guidelines.

**WALK THE COURSE**
Walk the course, as opposed to riding a golf cart, if able.

**WARM UP**
Do some aerobic exercise, stretching/mobility exercises, then practice swings to maximise performance and minimise injury risk.

**HELP OTHERS**
To feel welcome, and encourage others to play golf or take part in other physical activities.

**PROTECT YOUR SKIN**
Using sunscreen and appropriate clothing (collared shirt, hat, etc). Avoid excessive exposure to direct sunlight.

**FIT FOR GOLF**
Appropriate strength and conditioning exercises can decrease injury and illness risk, and improve performance.

**RULES**
Follow appropriate safety, golf cart safety, and lightning safety guidelines.

**BE SAFE**

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?

**SPREAD THE WORD**
Golf facilities and the golf industry can share key health benefits and messages with golfers and potential golfers.

**PROMOTE INCLUSIVITY**
Encourage increased participation by developing environments and price structures that are welcoming to all, including beginners.

**MULTI-FUNCTIONALITY**
Facilities in addition to golf could include for example, a gym, walking routes, child care.

**WOMEN & GIRLS**
Inspire and recruit more women and girls to play golf, and retain their participation in the game.

**PROVIDE**
Warm up facilities, and stock sunscreen, water and healthy food.

**AVOID**
Mandatory golf cart use, and encourage players to walk the course.

**PROMOTE SAFETY & SUSTAINABILITY**
Maintain policies, facilities and golf carts. Restrict water, energy and chemical use.

**GOLF IS A SPORT WITH WIDE RANGING HEALTH BENEFITS. BY TAKING THESE ACTIONS, THE GOLF INDUSTRY AND FACILITIES CAN MAKE A BIG CONTRIBUTION TO MAXIMISING THESE BENEFITS.**

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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 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. 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 Merollis’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 BJSIM, we
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.

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

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