

## Virtual Roundtable

# Musculoskeletal health, wealth and business, and wider societal impact

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### Virtual Roundtable Participants



**Video 1 Virtual Roundtable. Musculoskeletal health, wealth and business, and wider societal impact.** The video is playable in the HTML version.

#### Moderator

**P**rof Anthony Woolf, Consultant Rheumatologist; Director, Bone and Joint Research Group, Royal Cornwall Hospital, Truro, UK; Chair Arthritis and Musculoskeletal Alliance, UK; Chair, Bone and Joint Foundation; Co-Chair Executive Committee, Global Alliance for Musculoskeletal Health.

#### Speakers

Dr David Roomes, Chief Medical Officer, Rolls-Royce plc.

Dr Mark P. Connolly, Managing Director, Global Market Access Solutions, Switzerland; Guest Researcher, University of Groningen, Netherlands.

Prof Annelies Boonen, Professor of Rheumatology, Maastricht University Medical Center, Maastricht, the Netherlands; Care and Public Health Research Institute (Caphri), Maastricht University, Maastricht, The Netherlands.

Dr Suzanne Verstappen, Reader in Rheumatic and Musculoskeletal Epidemiology, Centre for Epidemiology Versus Arthritis, Division of Musculoskeletal and Dermatological Sciences, Faculty of Biology, Medicine and Health, The University of Manchester, Manchester, UK; NIHR Manchester Biomedical Research Centre, Manchester University NHS Foundation Trust, Manchester Academic Health Science Centre, UK; MRC Versus Arthritis Centre for Musculoskeletal Health and Work, University of Southampton, UK.

### Introduction

Musculoskeletal (MSK) conditions such as low back pain, neck pain, osteoarthritis and rheumatoid arthritis are the greatest cause of disability worldwide<sup>1,2</sup> and expected to increase in line with life

expectancy. The commonality is that these conditions are associated with pain, often chronic and physical disability which limits everyday activities including work since many work-related activities are dependent on good MSK function. The economic impact of MSK conditions is great on the individual, employers and on society through the costs of health and social care and through lost productivity. Work-related MSK conditions are reported by approximately three out of every five workers across the EU,<sup>3</sup> the most common being backache and upper limb pain. Of all workers in the EU with a work-related health problem, 60% identified MSK problems as their most serious. In addition, there are those MSK conditions not caused by work but which impact on the ability to work, which becomes an increasing problem with an ageing workforce. Together MSK conditions caused by work or impacting on work have an enormous economic burden through absenteeism, presenteeism and premature departure from the labour market. This great and growing multifaceted burden of MSK conditions requires a policy response<sup>4,5</sup> that considers actions needed at global and country level taking a life course and whole systems approach<sup>6,7</sup> to improve MSK health. The challenges of MSK health in the workplace have been responded to by the EU-OSHA Campaign of 'Lighten the Load' (<https://healthy-workplaces.eu/en>) and the need of a holistic approach considering prevention, health promotion and supporting those with MSK conditions whatever the cause has been emphasized.<sup>8</sup>

The main aim of the Roundtable was to raise awareness about this wider societal impact of MSK conditions and in particular the impact on work to encourage health and employment policies to be more proactive in reducing this burden. Specifically, the Roundtable reflected on the employer burden of persistent MSK pain, evidence-based approaches to occupational health interventions, relationship between health, employment, wealth and tax burden and potential route maps for policy making to connect Treasury and Health.

### Themes discussed

#### *What is the impact of poor MSK health on business?* David Roomes

Poor MSK health has several significant impacts on business, both direct and indirect: absenteeism, presenteeism, medical costs in certain jurisdictions including pharmacy costs (significant), early exit from the labour force and impact of co-morbidities—mental health in particular. There are also some less well understood and quantified impacts relating to absence: replacement labour (a challenge if highly skilled workforce), quality impact and training needs. Importantly, safety incidents may be higher in workers with MSK conditions.

The socioeconomic impact of chronic pain on workplace productivity is therefore high. Chronic MSK pain was one of the leading reasons reported for both *absenteeism* and *presenteeism* in a survey of 1.2 million employees.<sup>9</sup>

### ***What is needed for an employer to become proactive and doing more than legal requirements? David Roomes***

Most employers do not know the extent of the problem or what it is costing their businesses. A study recently conducted at Rolls Royce<sup>10</sup> to quantify this burden found that workers who had been referred to occupational health because of an MSK condition, when compared with controls, had significantly more all cause-OH referrals, more OH referrals due to mental health conditions and during the entire follow-up period, cases on average took 32.7 MSK-related sickness absences days—equating to 77 896 lost working days due to MSK. The economic impact was significant with the cost of all cause sickness absences four times higher in cases (£105 567) compared with controls (£25 676) at 12 months follow-up, the cost of mental-health-related sickness absences was higher in cases versus controls and medical early retirement was more frequent in cases versus controls. Of concern was that workplace safety incidents were higher in cases versus controls. This kind of quantified and specific information enables employers who are able to make decisions about how to invest in better MSK programmes and interventions, and see the potential benefits to the business.

### ***What is the wider impact in terms of social security, tax burden, lost productivity and societal impact? Annelies Boonen***

Societal impact is describing a loss of health, not in terms of life years lost but in terms of disability free life years and satisfaction with life. A societal economical perspective might consider around the impact of reduced work participation on gross domestic product (GDP)—the monetary value of what we as society produce when we are engaged in paid work (the market value of services we deliver, products we make). It represents the (economic) wealth of a country (society). When someone is ill and cannot work, then they contribute less to GDP, although in reality they are usually replaced at a future time by another person needing work. The impact on GDP is therefore cushioned. However, most societies are organized on the principle of solidarity, which means GDP is used to ensure access to healthcare or income substitution in the case of work disability. That means the person with an MSK condition will suffer income loss but society will also incur the costs of supporting them.

MSK conditions account for a third of incapacity/work disability benefits mainly as a consequence of the high number of persons affected by MSD at working ages.<sup>11</sup> The costs per person because of productivity loss (measured by gross income) is around 8000€/person per year (with variation on disease/population/country).<sup>12</sup> The impact of different diseases on work is often comparable, except that MSK conditions as comorbidity has always a stronger impact than multi-morbidity without one being a MSK condition.<sup>13</sup>

Preventing MSK conditions or treating early is the best way to reduce or avoid costs of productivity loss and we are seeing the employment gap closing in people with rheumatoid arthritis and spondylarthropathies with better therapeutic agents and strategies for their use. If such benefits as reduction in sick leave or work disability are considered, then return on invest of innovation in healthcare (cost-effectiveness) improves substantially.

### ***What is the potential economic gain by controlling the burden of MSK conditions on society? Mark Connolly***

Many health shocks and chronic health conditions can have broad fiscal effects for government in relation to lost tax revenues and disability payments. Understanding these broader fiscal consequences for government can be important in relation to priority setting, aligning government policies on active ageing and understanding how health and changes in health status influence government finances, for example, taxes and transfers. Current health technology assessment

(HTA) frameworks used by bodies such as NICE in the UK fail to capture the impact of health technologies on government. They do not look at the cross-sectorial impact that the NHS can have on other areas of government in relation to lost tax revenue and social benefits programmes. These points are underscored in an analysis of osteoarthritic hip and knee pain and how much government is influenced by lost tax revenue, social benefits compared with NHS costs.<sup>14</sup>

### ***What do employees need to enable them to stay in the workplace? What do health care providers need to do to enable people with MSK stay in work? What can employees (with or without MSK conditions) do to look after their own MSK health? Suzanne Verstappen***

There are some simple messages for what is needed to enable people with MSK conditions to remain in the workplace. Employees need support from line manager/employer which will often mean flexibility in their work, access to reasonable adjustments and the provision of training if needed change job. Health care providers need to ask question about impact of MSK on work during clinical visits. A simple question is needed such as ‘Do you experience any problems at work due to your MSK’ and, if yes, gain an understanding about impact and provide advice. Discussion about work should be part of disease management plan and work should be a clinical outcome. However, health care providers need guidance on how to refer or signpost people with MSK to the right services such as other health professionals (e.g. occupational health services, occupational therapist and physiotherapist) or funding schemes to remain in work or make adjustments (e.g. AccessToWork in UK; <https://www.gov.uk/access-to-work>). All employees also need to know how to look after their MSK health to try and prevent and reduce the impact of MSK conditions, such as by maintaining good physical fitness, taking regular breaks and ensuring a good work–life balance.

### ***What should employers do? David Roomes***

Employers need access to good occupational health advice and to a robust evidence-base. Healthcare is not core to most businesses and, on the whole, they prefer to make decisions based on data. Without information regarding the cost opportunity specific to their business, they will not invest. Businesses also need to know what works. There are myriad interventions available but the evidence for efficacy against occupational endpoints is weak.

Asking employers to ‘do more’ without giving them the right tool-set won’t result in progress. Given the focus on environmental, social and governance matters in the media and, more recently, from investors, employers are keen to focus on areas such as diversity and inclusion which represents an opportunity to raise awareness and increase investment in workplace MSK health. Partnering with academia, charities and others to investigate and show the benefits of interventions is important.

### ***What is needed at the policy level—what are the barriers or facilitators to a healthier workplace? All participants***

Having discussed the impact of MSK conditions on work and needs to be done by employers and workers, there is also a role for policy makers to encourage and facilitate creating healthier and more supportive work environments using legal and fiscal levers as well as through sharing and encouraging good practices. The first step is recognition that MSK health in the workplace is important with large potential gains for individuals and society if it is improved. This is beginning to happen in some countries, largely driven by the high costs of supporting those unable to work.

## Supplementary data

A transcript of this video is available as [supplementary data](#) at *EURPUB* online.

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## Conflicts of interest

A.W. is a director of MSK Aware Community Interest Company (CIC). D.R. is an employee of, and holds shares/stock options in, Rolls-Royce plc.

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