



HM Government

**VERSUS
ARTHRITIS**



Musculoskeletal Health:

A 5 year strategic framework for prevention across the lifecourse

Department of Health and Social care working with Public Health England and
Department for Work and Pensions

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-leading science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health, and a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the NHS in a professionally independent manner.

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Joint Foreword



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Musculoskeletal (MSK) conditions affect over 14.9 million people nationally, many of whom have symptoms of pain, stiffness, limited movement, and disability affecting their quality of life and independence. These conditions are a key contributor to multi-morbidity. If we fail to take action, our ageing population, rising obesity rates and lack of improvement in physical activity levels will continue to increase the number of people with MSK conditions.

Many major MSK conditions can be avoided, or their symptoms reduced, by staying active throughout the life course, ensuring we include at least twice weekly balance and strength activities, eat a healthy diet, and are supported by a workplace that promotes MSK health.

MSK conditions currently consume substantial health-system resources, and costs are projected to significantly increase. Local pathways are not always clear or effective, leading to avoidable costs and poor patient and work outcomes. The NHS alone spends over £5 billion annually in treating and supporting people with MSK conditions.

MSK conditions are the biggest cause of working days lost each year in the UK, after coughs and colds. An ageing population that is forced to retire early due to ill health will increasingly affect the economic status of individuals and society.

The increasing burden of MSK conditions and their cross-cutting contribution to multi-morbidity requires us to forge a new, whole-systems approach to collaborative prevention, early detection and treatment across the life course. That is why Public Health England, NHS England and Versus Arthritis along with other collaborators have committed to embedding prevention as a cornerstone for supporting people with MSK conditions to improve their health, while helping prevent people from developing them in the first place. The 5 year strategic framework for prevention presented in this document is a demonstration of that long-term commitment.

The ambition is to help support prevention and MSK health promotion work in every local area across England. This in turn will continue to reduce inequalities, raise the focus on MSK health as key to population health and wellbeing, and ensure that our healthcare resources are used most effectively.

System Collaborators



NHS England, NHS Improvement and Health Education England.

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Abbreviations and Glossary

Disability adjusted life-year (DALY) – a single metric of overall disease burden combining years of life lost (YLLs) due to mortality and years lived with disability (YLDs). One DALY can be thought of as 1 year of healthy life lost.

Evidence-based interventions – practices or programmes that have peer-reviewed, documented empirical evidence of effectiveness.

Global Burden of Disease (GBD) report – comprehensive effort to measure epidemiological levels and trends worldwide.

Horizon scanning – a technique for detecting early signs of potentially important developments through a systematic examination of potential threats and opportunities.

Inflammatory conditions – generic term used to cover a range of disorders that relate to inflamed joints, muscles, and tissues that connect or support organs and other internal body parts.

Life course (approach) – a perspective that views health as the product of risk behaviours, protective factors, and environmental agents encountered throughout our entire lives and that have cumulative, additive, and even multiplicative, impacts on specific outcomes.

Logic model – hypothesised description of the chain of causes and effects leading to an impact desired.

Making Every Contact Count (MECC) – an approach to behaviour change that uses the day-to-day interactions that organisations and people have with other people to support them in making positive changes to their physical and mental health and wellbeing.

Multi-morbidity – a person living with 2 or more long-term chronic conditions.

Musculoskeletal (MSK) conditions – a broad range of health conditions affecting bones, joints and muscles, pain syndromes and rarer conditions of the immune system.

Multiple long-term health conditions (MLTCs) – long-term conditions, or chronic diseases, are conditions for which there is currently no cure, and which are managed with drugs and other treatment. The number of people living with several of these conditions is increasing in absolute terms.

Non-communicable disease (NCD) – diseases that tend to be of long duration and are the result of a combination of genetic, physiological, environmental and behavioural factors.

Primary prevention – activities designed to reduce the instances of an illness in a population and thus to reduce (as far as possible) the risk of new cases appearing, and to reduce their duration.

Productive Healthy Ageing – Public Health England’s programme to promote healthier lives amongst older people, to reduce inequalities, and to promote meaning, purpose, and a sense of belonging for people as they age.

Quality-adjusted life year (QALY) – a measure of the improvement in both life expectancy and quality of life achieved by an intervention. It is a measure that is used in to capture the benefit of interventions across all health conditions so that the interventions for different conditions can be compared. One QALY is equal to 1 year of life in perfect health.

Secondary prevention – activities aimed at detecting and treating pre-symptomatic disease.

Tertiary prevention – activities aimed at reducing the incidence or recurrences of chronic incapacity, and thus to reduce the functional consequences of an illness, including therapy, rehabilitation techniques or interventions designed to help the patient to return to educational, family, professional, social and cultural life.

Theory of change – explains how activities are understood to produce a series of results that contribute to achieving the final intended impacts.

Work days lost – the number of work days lost due to sickness for all people in employment aged over 16 years.

1. Introduction

Public Health England (PHE) launched the Musculoskeletal (MSK) Health Improvement programme in April 2018. This was as a result of the need to act on the Global Burden of Disease (GBD) data and take a whole-system public health approach to MSK health. An initial system stakeholder event was convened in June 2018, followed by a series of theory of change and Logic Model development meetings. The intelligence gathered from these events has underpinned the development of this MSK health Logic Model and the 5 Year Strategic Framework for Prevention across the lifecourse. The framework identifies a shared vision underpinned by key objectives, deliverables, outcomes and desired impact by 2023, providing a strategic programme overview of MSK prevention for England.

The Logic Model provides a high-level overview of the national MSK programme. It does not aim to cover the operational level detail required for the annual business planning process.

1.1 Purpose of this document

The purpose of this document is to provide stakeholders and our system collaborators with a clear statement of PHE, NHS England and Versus Arthritis's commitments to promote MSK health and to prevent MSK conditions. This document will also be of interest to a wide range of organisations working on prevention of MSK conditions in the private, international and research sectors.

1.2 Aim of the Logic Model

This Logic Model consists of:

- the rationale underpinning the programme and programme activities
- the main objectives of the programme – such as the 4 work strands of the programme: Work and Health, Evidence into Practice, Data and Intelligence and Workforce
- the inputs and enablers at a programme level
- the range and types of activities that will be undertaken as part of the programme
- the outputs and outcomes of the activities, for instance the reasons for undertaking the activities
- the desired impacts of the programme by 2023

2. Background

2.1 Vision

Our vision is to: “Improve the musculoskeletal health of the population in England across the life-course, supporting people to live with good lifelong MSK health and freedom from pain and disability”.

2.2 Context and rationale for Logic Model

MSK conditions are a global public health concern, these non-communicable conditions affect the bones, joints, muscles and spine and are the greatest cause of disability in England¹. They may be broadly grouped as inflammatory conditions such as rheumatoid arthritis, conditions of MSK pain such as osteoarthritis of the hip, knee, neck and back pain, and osteoporosis and fragility fractures. They are costly for health services, with 20% of England’s population consulting their general practitioner about an MSK condition each year¹. MSK also impacts productivity and employers, only 59.4% of people of working age with an MSK condition are in work, and in 2017, MSK conditions were the second biggest cause of sickness absence, which accounted for over 28 million days lost in work (22.4% of total sickness absence). This costs the UK an estimated £7 billion a year².

The population of England has been ageing, yet for many people a longer life will involve more years spent in ill health³. The rates of obesity are rising with little change in physical inactivity levels, both of which are risk factors and exacerbate the impact of some MSK conditions⁴. MSK conditions cause pain, joint stiffness, change in body shape and limitations of movement. They fluctuate over time and can be unpredictable. They cause distress, not just because of the physical limitations they impose but because they alter a person’s perception of themselves and their ability to cope including with the world around them¹. In some cases, living with MSK conditions can have consequences for the life chances of an individual through the loss of work, and dependence on the state, family and friends.

Many of the foundations for lifelong MSK health are laid down before birth. The growth of muscles, bones and joints in the womb is an important determinant of MSK health. Infants with higher birthweight have stronger bones in adult life. Conversely, those with low birthweight are at higher risk of osteoporosis and fragility fractures in later life⁵.

An ageing population may mean that more people are living with MSK conditions, and a later retirement age may mean that people need to work longer with an MSK condition. Ageing populations along with rising obesity levels and little change in physical activity levels, may increase the number of people with MSK conditions¹. Past perception has been that many MSK conditions such as arthritis, osteoporosis and back pain are an

unavoidable part of the ageing process and the focus has been on conventional treatments to alleviate pain and discomfort, rather than on improved prevention and self-management.⁶ Furthermore, the number of people living with multi-morbidity is potentially growing, leading to a poorer quality of life.⁷ Mental health and MSK conditions in particular have a complex and reciprocal relationship, each exacerbating the other.

MSK conditions along with other long-term conditions are more prevalent in the most deprived populations.⁷ By the age of 65 years, almost 5 out of 10 people with a heart, lung or mental health problem also have an MSK condition.⁷

There is still much that can be done to encourage a positive approach to life-long good MSK health. As life expectancy rises, we must promote the concept of productive healthy ageing,⁸ efforts should be focused on prevention, early detection and treatment using evidence-based public health interventions. These are increasingly available, and can positively impact MSK health across the life course.⁸

Key stakeholders have collaborated to produce a number of tools and resources, with the focus on scale up and spread of cost-effective interventions that work to improve MSK health. To avoid duplication of resources and tools, opportunities to incorporate MSK health messages into existing resources such as PHE's One You marketing campaign, Making Every Contact Count (MECC) and NHS website need to be utilised.

The success of this MSK health improvement programme to date has been the commitment from partners and stakeholders to develop a systematic approach to identify the prevalence of some MSK conditions. This systemic approach to harnessing prevalence and quality outcome measures will support smarter commissioning. Better national and local intelligence about the nature, scale and impact of MSK conditions and their treatment will help improve future design and delivery of services.

New research can assist us in exploring the gaps to improve services, whilst encouraging innovation and new models of care. The delivery of an ambitious and innovative MSK health improvement programme requires a cross-cutting and comprehensive system approach, building on capacity, skills and capability from across the system.

2.3 Programme priorities

The MSK Health Improvement programme of work has been organised around the following 4 themes:

1. Work and Health – supporting employers and employees to understand the benefits of good MSK health through programmes that increase knowledge and use of existing tools and resources developed by PHE and partners.
2. Evidence into practice – scale up evidence-based interventions, measuring impact and sustainability. We will be efficient, effective and evolutionary, for example by incorporating MSK Health messages into existing products such as MECC, One You, and All Our Health.

3. Data and intelligence – developing new indicators, strengthening evidence to support commissioning and planning of resources, for example MSK health profiles.
4. Workforce – work with key partners including the Faculty of Public Health, Health Education England, Royal Society of Public Health to develop innovative learning programmes, and engage with experts to improve standards of practice across the specialist and wider Public Health workforce.

Research and international MSK health systems leadership are also key components of the programme and are aligned to the Logic Model objectives.

Research: Understanding the gaps in MSK prevention research, for example, addressing co-morbid mental health problems; physical activity; health inequalities and influencing funders to stimulate prevention research.

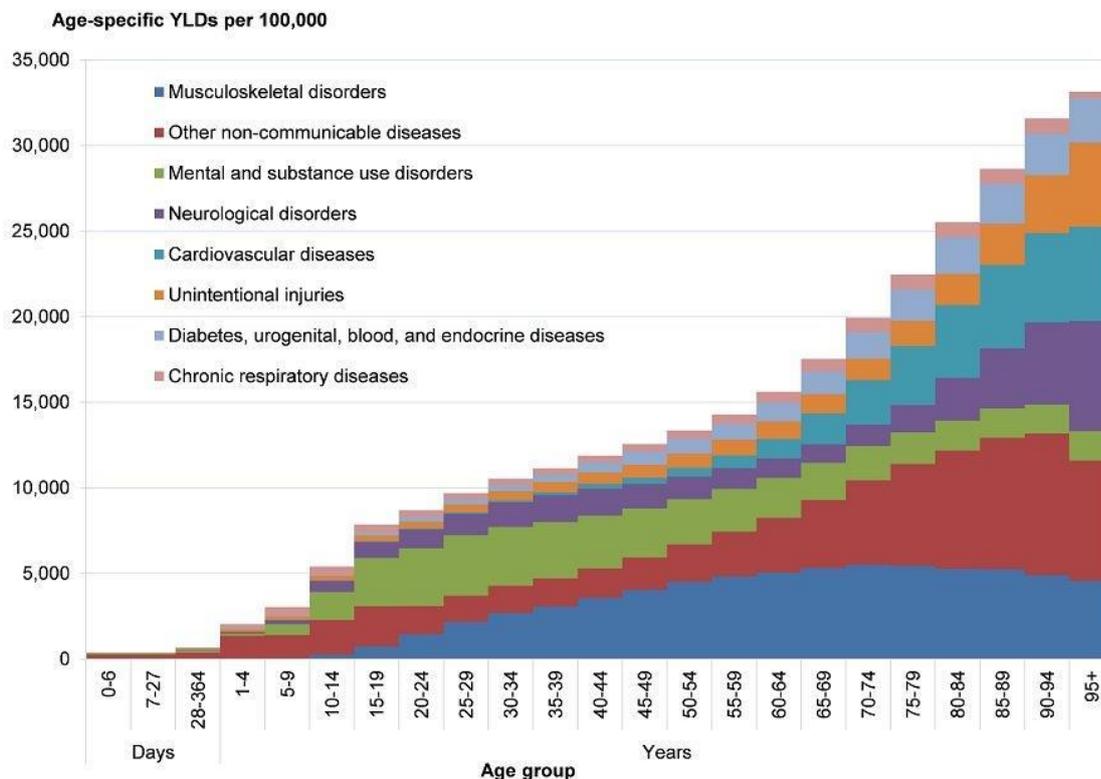
International MSK: Making links with international MSK public health leaders such as the World Health Organisation (WHO), exchanging knowledge and good practice and creating a platform for MSK Health learning to be shared.

2.4 Trends and inequalities in the prevalence of MSK conditions

Early intervention to prevent MSK conditions should start in childhood when bones are still growing. For example, bone strength peaks in early adulthood. There is also emerging evidence that maternal and in-utero nutrition can impact on bone health. Maximising bone health across the life course involves ensuring we get sufficient vitamin D, eat a calcium-rich diet and take sufficient physical activity. This will not only improve bone strength but also keep muscles strong. At every stage of life people can take steps to improve their MSK health and reduce the risk of developing an MSK condition.

In 2016, MSK conditions accounted for more than 22.1% of the total burden of morbidity in England, and low back and neck pain was the leading cause of morbidity.⁹ This is consistent with analysis of indicators from the **GP Patient Survey** presented in the **PHE MSK profiles**, which suggests that the proportion of people reporting a long-term MSK conditions was 17% in 2017/18. The percentage of people reporting a long-term MSK condition significantly increased with increasing age; 2.8% of 18 to 24 year olds reported having an MSK condition compared with 43.7% of those aged 85 years and over. However, this pattern by age is slightly different from that presented in the 2018 Health Profile for England, which uses GBD data. GBD data shows no increase in morbidity from MSK conditions after age 70 to 74 years (figure 1). Some MSK conditions – such as low back pain – increase with age, peak around age 75 to 79 years, then decline, while the prevalence of osteoarthritis and osteoporosis continues to increase with age¹⁰.

Figure 1: Morbidity rate by age and top 8 broad causes (level 2 disease groups), persons, England, 2016

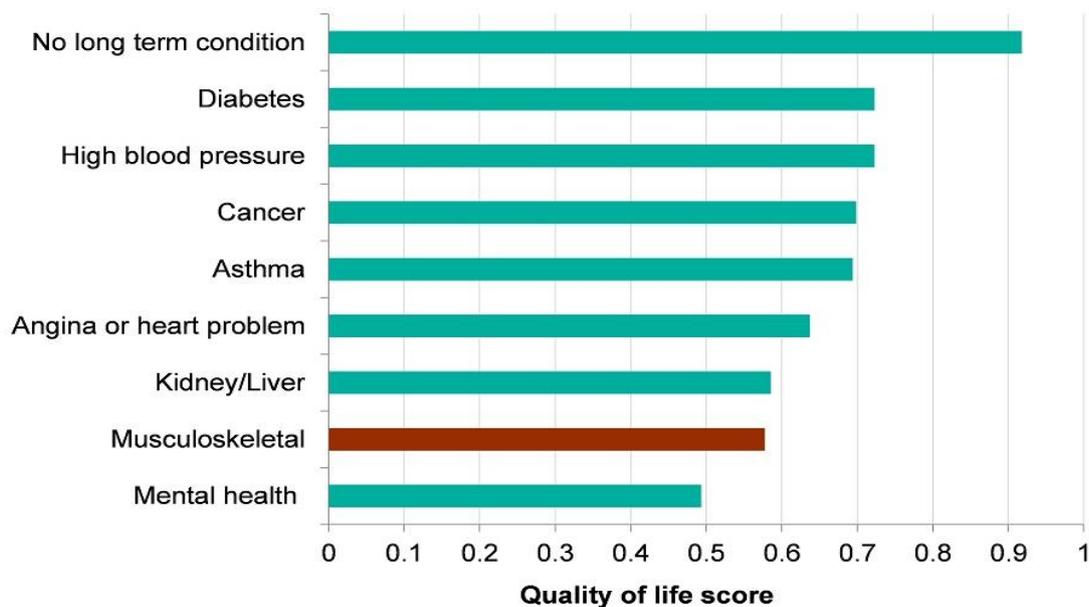


Source: Global Burden of Disease Study 2016 (GBD 2016) Results. Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2016.

There are wide inequalities in the prevalence of long-term MSK conditions. In 2017/18, women reported a significantly higher prevalence of MSK conditions than men (19% compared with 14.9%).¹¹ Prevalence also varied by ethnicity, with the highest prevalence (21.3%) in those who were of Irish group, compared to the lowest prevalence (6%) in the Chinese ethnic group. Prevalence in the English, Scottish, Welsh and Northern Irish ethnic group was 19%. Rates also varied by working status and were highest in the 'retired' working status group (33.8%) and lowest in those who were in full-time education (2.6%).¹¹ There are also inequalities in the prevalence of long-term MSK conditions by deprivation.

Having a long-term condition can reduce quality of life, and in 2016/17 those with a long-term MSK condition had an average EQ-5D (a standardised instrument for measuring health status) score of 0.58 compared with those without a long-term condition who had a score of 0.92.¹²

Figure 2: Average quality of life score for adults who live with a self-reported long-term condition, England, 2016/17



Source: PHE Analysis of General Practitioner Patient Survey (GPPS)

Working status affected quality of life in those with an MSK condition, with those who classed themselves as unemployed having a significantly worse quality of life (0.48) compared to all other work categories.¹³ In 2017 in the UK, 28.2 million working days were lost due to MSK conditions.¹⁴ In England, between 2015/16 and 2017/18 there were approximately 6.7 million working days lost due to MSK conditions made worse or caused by work, an average of 0.3 days per worker.¹⁵

2.5 Future prevalence

The number of people living with MSK conditions is likely to increase because of the ageing population. The number of fragility fractures in the UK is predicted to increase by 26% between 2017 and 2030 to more than 700,000 per year.¹⁶ An overall estimate of future levels of knee osteoarthritis can be produced by taking into account both the increasing size and ageing of the population, and the expected increase in obesity. Currently an estimated 8.75 million people aged 45 years and over in the UK have sought treatment for osteoarthritis, it is expected that by 2030 up to 17 million people will have osteoarthritis.^{17, 18}

3. Logic Model

A Logic Model is defined as a graphical or textual representation of how a programme of work is intended to operate – in this case, the programme to which the Logic Model relates is the 5 Year Strategic Framework for Prevention. Logic models link programme outcomes with the processes and theoretical aspects of that programme. The aim is to provide an account of what a programme will do and what it is meant to accomplish. In other words, the Logic Model design is a framework that outlines the complex relationships between inputs, activities and outcomes in relation to a specific programme goal.¹⁹

One of the key benefits of a Logic Model is the ability to provide a detailed, comprehensive justification for how inputs and activities connect to the desired outcomes. As a result, Logic Models are helpful for project management, resource allocation and strategic planning. Another noteworthy advantage of the Logic Model approach is its facilitation of critical thinking through the process of planning and communicating system-wide objectives and outcomes.¹⁹ This critical thinking also extends to consideration of key enablers, barriers and assumptions that are relevant to different parts of the Logic Model.

By presenting the programme visually, making connections between the vision and eventual impacts, the Logic Model provides a theory of change template for measuring success. The outputs column highlights deliverables to be completed through the activities; the outcomes column defines what success looks like in terms of achieving the objectives; and the impacts column indicates how the programme will be assessed against whether it achieves its goal(s) and what wider effects may occur. However, it is not necessary for detailed outcome and impact metrics to be listed in a Logic Model, it is more useful as a simple ‘stripped down’ and accessible framework providing an overview of the main outcome and impact categories, which more detailed measures can fit within.

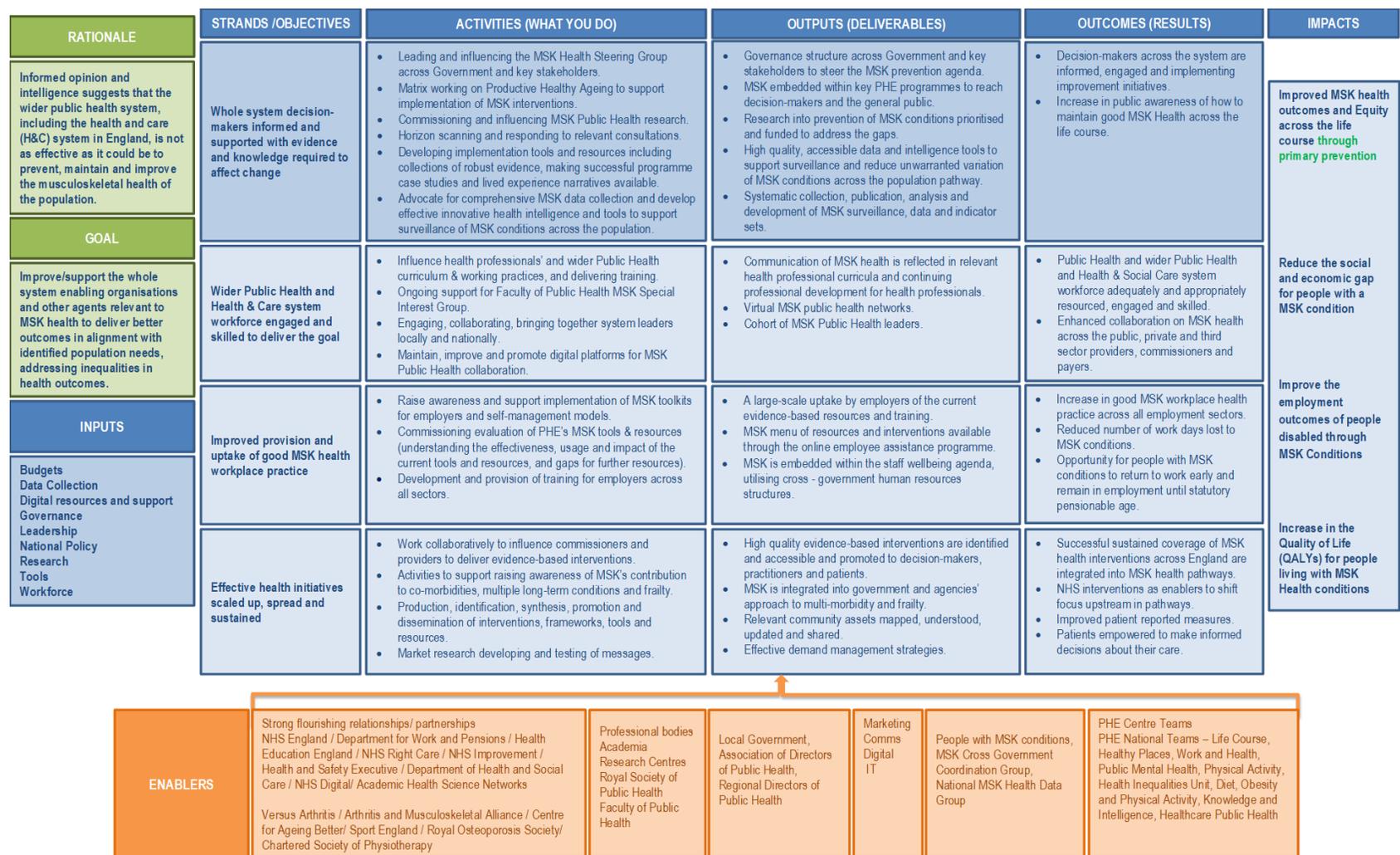
This Logic Model along with implementation plans to be developed will be reviewed regularly to determine whether the objectives are being met, the outcomes achieved, and the impact made on the population of England.

Musculoskeletal Health: 5 year strategic framework for prevention across the lifecycle

3.1 Musculoskeletal (MSK) England Programme Logic Model

Programme Vision: Help maintain and improve the musculoskeletal health of the population in England (across the lifecycle), supporting people to live with good lifelong MSK health and freedom from pain and disability – such as prevention.

Premise: Achieving the goal(s) below will help to achieve the vision, for example, by encouraging behaviour change among the population and system leaders of England.



Appendices

Appendix 1: Additional Information Supporting Logic Model Activities

This section will provide additional detail on some of the activities outlined in the Logic Model. The impact and outcomes of each activity are already highlighted in the Logic Model.

Whole system decision makers informed and supported with evidence and knowledge required to affect change:

Leading and influencing the MSK Health Steering Group across government and key stakeholders. A cross-government steering group was formed in March 2019. The purpose of the group is to provide system leadership to ensure effective coordination and collaboration amongst government agencies and key stakeholders with an interest in the MSK agenda and to avoid duplication of efforts.

Commissioning and influencing MSK public health research. Horizon scanning and responding to relevant consultations. Working with leading MSK academics on inequalities and MSK health, understanding where we need to influence further commissioning of research, links to international research and new innovations.

Developing implementation tools and resources including collections of robust evidence, case studies of successful programmes and lived experience narratives. A collaborative approach with partners to build the evidence of what works using examples of best practice. Spread and scale the use of current tools, evaluation of implementation and impact to identify the gaps in the system.

Wider Public Health and Health and Care system workforce engaged and skilled to deliver the goal

Influence public health practitioners and health professionals' curriculum and working practices and delivery of training. Collaborating with HEE and other relevant partners to disseminate online tools and resources aimed at capacity building such as the **MSK First Contact Practitioner Framework** and All Our Health. PHE will advocate the development of new resources to meet the needs of the public health workforce.

Ongoing support to the Faculty of Public Health MSK **Special Interest Group** (SIG). The SIG is an opportunity for the public health workforce to engage with the MSK Health improvement programme, providing support to disseminate the key health messages, raise awareness of activities and influence the future MSK Health policy agenda.

Maintain, improve and promote digital platforms for MSK Public Health collaboration. Raising awareness of existing tools and resources, evaluating impact and engaging with the workforce to identify the gaps i.e. using the Knowledge Hub, PHE Health Matters, One You, and All Our Health. Working with system partners to integrate and support the development of new resources.

Improved provision and uptake of good MSK health workplace practice

Raise awareness and support the implementation of **MSK toolkits for employers and self-management models**. Opportunity to highlight at key conference events, workshops, digital platforms and partnership meetings. Support the work of the clinical work and health champions, and advocating implementation through development and provision of training for employers across all sectors.

Effective health initiatives scaled up, spread and sustained

Work collaboratively to influence commissioners and providers to deliver evidence-based interventions. Sharing information and good practice, identifying the relevant tools and resources such as the PHE **MSK Return on Investment toolkit**, designed to guide and support commissioners and providers to implement cost-effective and evidence-based interventions such as **ESCAPE Pain** and **STarT Back**.

Activities to support raising awareness of MSK contribution to co-morbidities, multiple long-term conditions and frailty. Sharing information and intelligence about the data that is available, working with system collaborators to identify gaps and research opportunities to advance the understanding on co-morbidities in relation to MSK health. Collaborating within PHE national teams and external partners to better understand and raise awareness of the underlying risk factors leading to frailty. Emphasising the evidence that identifies the links between Mental Health and MSK conditions, to align policy objectives.

Market research developing and testing of messages. Gathering intelligence to evaluate and identify initiatives that work and messages that have minimum impact, using social media platforms, surveys and existing PHE tools such as One You and MECC.

Appendix 2: National Activities

Public Health England National Teams

Allied Health Professionals

The Allied Health Professionals (AHPs) are a group of 14 health and care professions who collectively make up the third largest workforce in the NHS. They work across all sectors including local government, social care, education, housing, criminal justice, voluntary and private sectors. More than half of these 14 professions (physiotherapists, occupational therapists, **diagnostic radiographers**, dietitians, **orthoptist**, **osteopath**, podiatrists, **prosthetist/orthotist**, **therapeutic radiographer**) work with people that may have an existing MSK condition and all of them have opportunities to have MSK Making Every Contact conversations

PHE has been working closely with the AHPs for the last 5 years to optimise the public health contribution that these professionals make as part of their roles.

AHP **public health strategy** for the period 2019-2024. PHE Leadership was provided to develop this UK wide. This strategy provides the enablers to ensure that public health including MSK prevention is embedded into the roles of all AHPs and that AHPs can advocate for and evidence the benefits of upstream interventions within their services. PHE will lead an implementation group to address MSK knowledge and skills, evidence and impact, profile, strategic connections and leadership.

PHE is working with the Faculty of Public Health and Health Education England to scope the potential to develop public health advanced clinical practice roles. Such roles could support an increase in public health leadership within clinical services, for example physiotherapists leading on MSK prevention across and integrated care system. In addition, the team is supporting the development of physiotherapy MSK first contact practitioner roles.

Through **All Our Health** and the development of a Social Prescribing Framework for AHPs (to be published) we will continue to support health care professionals to make the most of social solutions to support MSK health and wellbeing of the people they support.

PHE continues to work with the Oscar Kilo team¹ to develop a national wellbeing service for policing and fire and rescue services. This includes promoting MSK and working with emergency services to embed MSK prevention in the national wellbeing service.

¹ Oscar Kilo has been initially funded by Public Health England and was created and designed to host the Blue Light Wellbeing Framework and bring together those who are responsible for wellbeing. It is a place to share learning and best practice from across emergency and blue light services so organisations can invest the very best into the wellbeing of their staff.

Diet, obesity and physical activity

PHE has a broad programme of work in place, which spans the life-course and is dedicated to improving population level dietary health, increasing levels of physical activity, tackling sedentary lifestyles and preventing and tackling obesity. Improving these health behaviours and associated conditions contribute towards reducing the burden of non-communicable disease, which includes ensuring good MSK health, and the prevention and management of MSK conditions.

PHE's diet, obesity and physical activity programme aims to:

- move the population toward the healthy, balanced diet expressed in the Eatwell Guide and its supporting advice
- tackle 'all age' obesity through leadership, engagement, and supporting delivery of actions to address the obesogenic environment
- increase population physical activity in line with Chief Medical Officers' guidelines

The work includes commitments within the Government's plan to significantly reduce child obesity and supports the strategic direction of the NHS Long-Term Plan. Key actions include sugar reduction and total calorie reduction programmes; supporting local delivery of the childhood obesity plan, including by the wider public health workforce; working with industry, schools, local government and the NHS; and supporting the local commissioning of appropriate secondary prevention services; and continue work to reduce salt intake within the population.

Physical activity has an important role in ensuring good MSK health, and the prevention and management of MSK conditions.

Key to improving MSK health is doing more to support regular muscle and bone strengthening activities, which are a component of the national physical activity guidelines. Work is underway to embed this across the work of the PHE physical activity programme, including:

1. Development and promotion of national guidelines. PHE with the Centre for Ageing Better commissioned an evidence review on **Muscle and bone strengthening and balance activities for general health benefits: in adults and older adults** that has been used for the development of revised UK Chief Medical Officers' guidelines to be launched in Summer 2019. PHE is supporting the development and launch of the new guidelines, and will support their implementation.
2. Supporting Healthcare professionals to incorporate physical activity within clinical care. PHE and Sport England lead the national Moving Healthcare Professionals programme, which aims to increase knowledge and skills and changing clinical practice of healthcare professionals to incorporate physical activity within routine patient care. This work includes the promotion of physical activity and MSK, including through the peer-to-peer training of healthcare professionals by a national network of 45 Physical Activity Clinical Champions. The online **Moving Medicine**

resource for healthcare professionals developed by the Faculty of Sport and Exercise Medicine with health charities and e-learning developed with Health Education England to be launched in 2019.

3. System leadership and partnership. Ongoing collaboration and partnerships with stakeholders to identify and support activity to raise awareness and take action on physical activity to improve MSK health.

Health and Work

MSK conditions together with mental health conditions are 2 of the biggest drivers of health-related worklessness. Therefore, in order to reduce the risk of people being out of work due to ill health, activities in this area include:

Supporting employers to reduce the risk of worklessness due to MSK conditions – promotion and evaluation of the PHE/Business In The Community employer-facing **MSK toolkit**.

Changing culture and practice amongst healthcare professionals (HCPs) – PHE and the Department of Health and Social Care (DHSC)/Department of Work and Pensions (DWP) Joint Unit lead the Work as a Health Outcome programme. Work in phase 3 of the programme (2019/20) includes:

- Overseeing the medical champions pilot (3 GPs and Occupational Therapists delivering peer-to-peer training and work within local health systems to change culture and practice).
- Piloting newly developed undergraduate medical curriculum resources on Health and work (which include MSK).

Promoting continuing educational (e-learning) resources for HCPs – this includes a specific MSK-themed module aimed at all HCPs.

System leadership and partnership – ongoing collaboration and partnerships with stakeholders to identify and support activity to raise awareness and act on MSK-related worklessness.

Healthy Places

The Healthy Places team works in partnership with local and national partners on a wide range of activities related to 'place'. Where we live, work and play has a big impact on our health and wellbeing. The programme supports the development of healthy places and homes. The **evidence resource** shows that improved MSK is associated with topics across our portfolio: better neighbourhood design; provision of diverse housing types; urban food growing; improved air quality; access to/engagement with the natural environment; and better transport. Hence, all our activities are relevant to MSK in that they tackle those aspects of the physical environment that contribute to MSK conditions, along with many other conditions. Work within Healthy Places focuses on:

- providing system leadership and high level management with other government departments and national stakeholder organisations
- creating a strong network of partners
- supporting the development and access to evidence base for PHE and local teams
- building skills and capacity by providing a set of tools, training and learning events to support local awareness and good practice

Healthcare Public Health Team

PHE's Healthcare Public Health (HCPH) team hosts the National Falls Prevention Coordination Group which is made up of 31 national organisations with a remit for falls and treatment of fall-related injuries such as fragility fractures. The group:

- provides leadership for falls and falls prevention activity in England
- ensures good communication and coordination across stakeholders involved falls and falls prevention
- supports the uptake and dissemination of good practice around falls and falls prevention
- provides input to relevant policy and strategy
- where necessary, provides a task and finish approach to take forward agreed actions and milestones
- supports the delivery of high quality, efficient and cost-effective falls-related services in England

HCPH team and NFPCG activity in terms of MSK prevention priority areas:

Evidence into practice:

- developing the 'Falls and fracture consensus statement' and resource pack outlining key evidence-based prevention interventions and approaches to commissioning these
- Providing briefings to update stakeholders around significant changes in the evidence base.

Data and intelligence:

Developing a set of quality markers for strength and balance exercise to support areas around self-audit and local intelligence.

Life Course Team

There has been a long-term increase in life expectancy and people are living longer than at the start of the century, but since 2011 the rate of increase in life expectancy has slowed for both sexes, and there are now half a million people in their 90s in the UK.²⁰ By 2041 in the UK there will be an estimated 3.2 million people aged 85 years and older.²¹ Longer lives are a benefit to society in many ways, including financially, socially and culturally, because older people have skills, knowledge and experience that benefit the wider population. There is an opportunity to utilise this increased longevity as a resource, whilst challenging ageism and the view that retirement is about 'sitting more and moving less'. As life expectancy rises, the concept of **Productive Healthy Ageing** (PHA) should be promoted, this includes:

- improved health and wellbeing
- increased independence and resilience to adversity
- the ability to be financially secure through work and build resources
- engagement in social activities
- being socially connected, with enhanced friendships and support
- enjoying life in good health

However, the reality of the situation is that people are living longer in poorer health, particularly those in more deprived parts of the country. The older a person is, the more likely they are to experience chronic diseases and disabilities such as MSK, which can impact negatively on productive healthy ageing.

PHE seeks to embed concepts of Productive Healthy Ageing into cross-cutting work programmes, taking forward work in a number of key areas which relate to MSK:

- promoting the importance of strength and balance activity for good MSK health and preventing falls and frailty
- working with system partners to promote the importance of productive healthy ageing across a range of areas
- strengthening messages on the importance of staying physically active across the life course, including for older adults
- tackling health inequalities with a focus on healthy life expectancy
- providing support for local areas to promote strength and balance activity as well as MSK and falls prevention interventions, including through the production and promotion of return on investment tools
- improving and developing the metrics for Productive Healthy Ageing

Public Mental Health

Mental health problems and MSK are commonly coexisting. This co-morbidity is often due to one problem being the precursor of the other.

The co-occurrence of physical and mental health problems rises with age and the association is stronger among the least well off.²² Depression and anxiety is 4-times more common among people in persistent pain compared to those without pain.²³ People with chronic low back pain have been shown to have a significantly higher frequency of MSK and neuropathic pain conditions and common sequelae of pain such as depression (13% vs 6.1%), anxiety (8% vs 3.4%) and sleep disorders (10% vs 3.4%), compared to people without low back pain.²⁴ The odds of back pain in people with symptoms of depression have been shown to be 50% higher than in those without symptoms of depression.²⁵

When mental and physical health problems are prevented or treated in an integrated way people can achieve better outcomes. Therefore, the public mental health approach recognises the importance of protecting and improving the MSK health of people with a mental health problem as well as the mental health of people with an MSK condition. Activities in this area include:

- as part of the Prevention Concordat for Better Mental Health
- promote implementation of Everybody Active Every Day
- embed concepts of productive healthy ageing and maintaining good health in older years – into the principles and case studies of local implementation
- influence NHSE Commissioners and IAPT providers to integrate appropriate messages about muscle strength and balance into their actions to increase physical activity as part of mental health promotion and treatment to contribute to reducing falls and frailty.
- supporting and promoting cross-sector work to reduce the risk of people being out of work due to ill health, Health and Work

NHS England & NHS Improvement: MSK Programme

NHS Long-Term Plan

The Long-Term Plan for the NHS 2019 sets out a 10-year vision for a sustainable and efficient NHS. It recognises the growing prevalence of MSK conditions, their impact on physical and mental health services, on employment and their link to obesity. There is commitment to gaining greater clarity on existing targets (such as surgery waiting times) through the Clinical Standards Review in Spring 2019 and to expand the number of physiotherapists working in primary care networks (PCNs) – including direct access without a GP referral including MSK First Contact Practitioners and digital access to ESCAPE-pain (Enabling Self-management and Coping with Arthritic Pain through Exercise). It makes a commitment to improving research, more investment in primary and community care, expansion of personalised care; Reform and reconfigurations – PCNs, redesigned Outpatients, Digital Technology, Tackling Health Inequalities, addressing unmet need and delivering higher value interventions.

NHS Right Care

NHS Right Care is a clinically led national programme designed to drive financial efficiency, productivity efficiency and improve patient outcomes and experience. The Programme works collaboratively across NHS England & Improvement, with systems and in partnership with organisations including Public Health England. Working with a central national team, the regional NHS Right Care teams support systems using variation data and robust evidence to redesign pathways, which include MSK conditions, to make improvements in both spend and patient outcomes. In 2018/19 NHS Right Care worked with NHS England's National Clinical Director for MSK and NHS Improvement's Getting It Right First Time (GIRFT) programme to develop a clinically-led approach for identifying interventions for improving MSK outcomes. In October 2018/19, the first National Priority Initiative (NPI) for MSK was launched to improve patient outcomes at scale by improving pain management and reducing disability. The focus for the first national priority initiative is on the National Back Pain Pathway which is to be implemented through Clinical Commissioning Groups (CCGs). The National Back Pain Pathway has been endorsed by the National Institute of Health and Care Excellence (NICE) and the UK Spinal Services Clinical Reference Group.

Elective Care Transformation programme

The **Elective Care Transformation programme** aims to support local health and care systems to work together to better manage rising demand for elective care services and to improve patient experience and access to care and provide more integrated, person-centred care. Patients should be directed to the right person, in the right place, first time. There will be a continuation of 2018/19 high impact Interventions and initiatives as shown below.

MSK Clinical Review and Triage

MSK triage services provide a single point of access for local MSK referrals. They provide specialist clinical review of incoming referrals and triage patients to the most appropriate setting for further treatment and/or diagnosis. The aim of MSK clinical review and triage services is: to avoid inappropriate referrals, improve the quality of referrals and ensure that people with MSK conditions are directed to the right care setting, first time. MSK clinical review and triage services reduce demand on local secondary care services and have the potential to reduce referrals by 20% to 30% (equivalent to 2% to 3% of all GP referrals).

Standard referral templates

A standardised MSK referral template is a document available on primary care IT systems that guides referrers to provide appropriate referral information. It can reduce the number of inappropriate referrals and improve the quality of referral information received, ensuring that referral criteria are met, and sufficient details are transferred with the patient at the point of referral. It reduces waiting time for patients requiring an appointment with a hospital consultant, ensuring the patient is directed to the right person, in the right place, first time. CCGs must have clear referral criteria for MSK services, including conditions covered and clinical indications for referral, which are communicated to all GPs.

First Contact Practitioner Service

A First Contact Practitioner (FCP) is usually an Advanced Practice Physiotherapist with the advanced skills necessary to assess, diagnose and manage MSK conditions. The service enables patients who would usually present to the GP in primary care with an MSK issue to either refer themselves directly into existing physiotherapy services or see an FCP who is based in general practice. Patients presenting with MSK make up to 30% of primary care consultations and 20% of all GP referrals. Enabling people to self-refer to first contact MSK practitioner services can speed up access to treatment, reduce GP workload and associated costs, lower prescription costs, increase self-management and reduce inappropriate referrals to secondary care. Three FCP-MSK to be rolled out in each STP during 2019/20.

MSK self-management education

Self-management education encourages and empowers patients to take responsibility for their own health and wellbeing through behavioural change and improve their quality of life. It follows NICE guidance on self-management interventions (CG177, 1.3.2) and can be provided in various ways for example: through local workshops or as an online resource. Highly-activated patients are more likely to adopt healthy behaviour, to have better clinical outcomes and lower rates of hospitalisation, and to report higher levels of satisfaction with services. It should also increase the quality and amount of information available to patients and practitioners, along with their understanding of their condition and their ability to self-manage. This can reduce the workload for health professionals and delay the need for surgical intervention.

Patient passport

A patient passport is a document that supports people with MSK conditions to take an active role in their care, self-manage effectively and access support when they need it. It adheres to NICE guidance on patient information (CG177, 1.3.1). The passport encourages users to make shared decisions about their care and provides information on self-management techniques and support available locally.

Transforming outpatients through Telephone follow up

Telephone follow up allows selected patients, such as post-intervention or post-diagnostic, to access healthcare virtually as opposed to face-to-face. Telephone follow up improves access to care, as this is often more convenient for patients, may also reduce appointment length.

Getting It Right First Time programme

GIRFT is a national programme led by expert clinicians and is designed to improve the quality of care within the NHS by reducing unwarranted variations. Tackling variations in the way services are delivered across the NHS, and by sharing best practice between trusts, GIRFT identifies changes that will help improve care and patient outcomes, as well as delivering efficiencies such as the reduction of unnecessary procedures and cost savings. The GIRFT team investigates the data with its peers and discusses the individual challenges they face. Support is offered across all trusts and **Sustainable and Transformation Partnerships** (STPs) to drive locally-designed improvements and to share best practice across the country. GIRFT has reviewed 37 clinical specialties leading to national reports, including orthopaedics, spinal surgery, rheumatology and upcoming trauma.

Evidence-Based Interventions Programme

The **Evidence-Based Interventions Programme** proposed clinical criteria for 17 interventions which apply in all care settings, including; knee arthroscopy with osteoarthritis; injection for nonspecific low back pain without sciatica; shoulder decompression; carpal tunnel syndrome release; Dupuytren's contracture release and trigger finger release. With guidance from specialist and primary care clinicians, work is ongoing to review local compliance to the evidence-based programme.

Personalised Care

Personalised Care will benefit up to 2.5 million people by 2024, giving them the same choice and control over their mental and physical health that they have come to expect in every other aspect of their life. Personalised care is based on 'what matters' to people and their individual strengths and needs. The NHS Long-Term Plan says personalised care will become business as usual across the health and care system and Universal Personalised Care confirms how we will do it. People access personalised care through 6 key components which will come together through a model of:

1. **shared decision making**
2. **personalised care and support planning**
3. **enabling choice, including legal rights to choice**
4. **social prescribing and community-based support**
5. **supported self-management**
6. **personal health budgets** and integrated personal budgets

Health and Work Programme

NHS England has worked closely with the cross-government Work and Health Unit since it was formed in 2015. The aim of the partnership is to identify opportunities to improve the interface between **employment support and health services**, including for people with MSK conditions.

Versus Arthritis

Versus Arthritis exists so the world no longer tolerates the impact of arthritis.

All of us are pushing to defy arthritis. Alongside volunteers, healthcare professionals, researchers and friends, we do everything we can to push back against arthritis. Together, we'll continue to develop breakthrough treatments, campaign relentlessly for arthritis to be seen as a priority and support each other whenever we need it.

Versus Arthritis supports the MSK prevention objectives in a number of ways, including:

1. whole system decision makers informed and supported with evidence and knowledge required to effect change. Versus Arthritis will continue to influence decision makers about the need and impact of a public health approach to MSK conditions, including ensuring that people's lived experiences are considered. The charity will also continue to support the enhancement of the quality and coverage of MSK health intelligence such as through the development of MSK prevalence estimates for use on resources such as PHE's Fingertips website.
2. wider PH and H&C system workforce engaged and skilled to deliver the goal. Versus Arthritis will continue to engage and support MSK healthcare professionals through the provision of education and training, alongside supporting development of MSK leaders who can make transformational change happen locally.
3. improved provision and uptake of good MSK health workplace practice. Versus Arthritis aims to be an exemplar employer, both implementing and also influencing and promoting to others' working environments, spaces and practices that support employees' health and well-being, with an emphasis on promoting good MSK health and supporting people with arthritis. For more information about our approach, the [supporting MSK health at work case study](#) is available.
4. Effective health initiatives scaled up, spread and sustained. Nationally, Versus Arthritis will champion the importance of scaling up MSK interventions and will identify such interventions to enhance local roll out of, such as ESCAPE-pain.

Department of Work and Pensions

Intensive Personalised Employment Support programme

In December 2018, the Department of Work and Pensions (DWP) launched a **£40 million personalised support package** – the Intensive Personalised Employment Support programme – to support people living with a disability who are unlikely to move into work within the next year or longer and may need additional support.

The support will allow disabled people to work with a dedicated key worker to get and stay in employment and is expected to benefit 10,000 people.

The voluntary scheme will be rolled out across England and Wales in 2019, and applicants will receive support for up to 21 months, including 6 months of in-work support for those who get a job.

DWP support to help disabled people get into and thrive in work includes – but is not limited to – the **Disability Confident scheme**, the **Work and Health programme**, the **Access to Work grant**, **Jobcentre Plus services** and **Personal Independence Payment**.

DWP and DHSC Joint Work and Health Unit

Challenge fund

The **Work and Health Unit** (WHU) has launched a multi-million pound **challenge fund** to expand its understanding of what works in MSK (and Mental Health). This aims to test new approaches to help people experiencing mental ill health or MSK issues to remain in employment.

The fund is the latest in a series of government measures which form part of a **10-year strategy** (Work and Health Unit published *Improving lives: the future of work, health and disability*) to get 1 million more disabled people in work by 2027.

Backed by £4.2 million in funding from the WHU's Innovation Fund, 19 **successful projects** were funded, 12 of which have an MSK theme. These will cover a range of elements, including self-management support and resources via technological advancements; pain advice and consultation; vocational advice/support; testing early intervention; building upon a localised integrated model of delivery; supported return to work; and occupational therapy.

The main themes for these small scale, proof of concept projects (due to complete by March 2020) are:

- helping people stay in work by increasing their ability to self-manage their conditions
- helping people access advice and support about what sort of work they might be capable of doing given their wider needs and circumstances

- developing new approaches to help employers and individuals develop workplace solutions, or ways of working that facilitate greater participation of people experiencing these conditions.
- improving systems by joining up services to strengthen communication, liaison or joint action

Funding research mapping existing UK Occupational Health (OH) and MSK service provision

There is currently limited literature on a nationwide picture of OH and MSK provision. We have commissioned a research partner to answer:

- which models of MSK and OH service provision are available
- where the the gaps exist in provision – both geographically and by service type
- what the implications are for the WHU in developing policy and practice in MSK and OH?

The aim is to identify gaps and weaknesses and to learn about what works and what the emerging models are.

First Contact Practitioner evaluation

The WHU is partnering with the Chartered Society of Physiotherapy (CSP) to evaluate employment related outcomes delivered by the **First Contact Practitioners** (FCP) programme.

The FCP in Primary Care pilot is subject to a multi-component evaluation.

The CSP is funding a component focusing on the collection and evaluation of patient-related experience and outcome measures – as part of this, the WHU's Innovation Fund is funding the collection, evaluation and report of employment-related outcomes

The overall aim is to allow the WHU to assess the impact of FCPs on helping people with MSK conditions back into work or preventing them falling out of work

Health Education England

Health Education England (HEE), PHE, Skills for Health, NHSE, and ARMA launched a new framework in August 2018, aimed at practitioners who will be the first point of contact for people with MSK conditions – [Musculoskeletal Core Capabilities Framework](#).

The document was commissioned by HEE and NHSE to ensure that people with MSK conditions get rapid access to the right care from first point of contact and are fully involved through shared decision making and self-management.

The Core Capabilities Framework sets out the essential skills and knowledge necessary for staff with a role as a first point of contact for adults presenting with undiagnosed MSK conditions.

HEE is preparing an 8-session MSK in Primary Care E-Learning around the framework, that is currently in development. To be launched late June 2019 and will undertake a pilot programme of the material.

Arthritis Research and Musculoskeletal Alliance

The [Arthritis Research and Musculoskeletal Alliance](#) (ARMA) is an umbrella body representing the breadth of MSK conditions and professionals. The vision for MSK health includes that the MSK health of the population is promoted throughout life. ARMA is a member of the [European League Against Rheumatism](#) (EULAR) and the [Global Alliance for Musculoskeletal Health](#), disseminating information from these organisations to the MSK community across the UK. Prevention is a high priority for many of the member organisations. We promote this by:

- bringing together our members to jointly influence policies related to MSK prevention.
- supporting good practice through our webinars and roundtables – many of which are relevant to prevention.
- supporting joint working through our newsletter, website and MSK Hub
- ARMA is also actively involved in [Bone and Joint Week](#) – an annually occurring international campaign with dedicated days to highlight major rheumatic and MSK conditions

Centre for Ageing Better

The [Centre for Ageing Better](#) (CfAB) is a charity, funded by an endowment from The National Lottery Community Fund, working to create a society where everyone enjoys a good later life. As part of the What Works Network, everything we do is grounded in evidence and analysis. We are working towards 4 priority goals of healthy ageing, fulfilling work, safe and accessible homes and connected communities.

In December 2018, Ageing Better signed an memorandum of understanding with PHE, marking the start of a 5-year strategic partnership to realise a joint ambition for everyone to have 5 extra years of healthy, independent life. The strategic partnership will use evidence-based public health interventions to help people maintain or prevent deterioration in their functional ability as they age.

Most recently, Ageing Better's work on the provision of community-based strength and balance training emphasises the critical importance of fragility and falls prevention programming. The current Chief Medical Officers' guidelines for physical activity recommend that older adults do at least 2 sessions of muscle strengthening and balance activities per week. The report **Raising the bar on strength and balance**, jointly produced with the University of Manchester's Healthy Ageing Research Group, shows a need for sustained, targeted funding for community-based programmes, with affordable, accessible and proven options available for everyone.

Furthermore, through the fulfilling work agenda Ageing Better is seeking to increase and improve support for those with Long Term Conditions in the workplace. Ageing Better will primarily seek to influence employer practice in this area in order to bring about better support for those with, or at risk from, a wide range of long-term conditions, including MSK.

Royal Society of Public Health

The Royal Society of Public Health (**RSPH**) exists to improve and protect the public's health and our activities sit broadly within 6 strategic priorities. RSPH aims to support PHE's MSK programme via the following work streams:

Wider workforce – an impact pathway for MSK as part of the Everyday Interactions Framework, which has been developed for the wider workforce.

Educational services – Accreditation of MSK e-learning modules and services, and other behaviour change Special Interest Group.

Effective Health Interventions – celebrating success is key, particularly in scaling up what works. Development of an award to recognise and incentivise best practice; disseminating the information of what works via webinars, knowledge hub, workshops and round table events.

Royal Osteoporosis Society

The **Royal Osteoporosis Society** (ROS) provides information, support and networks for people living with osteoporosis, and works with healthcare systems to improve diagnosis and care. Our vision is a future without osteoporosis. ROS will continue to collaborate and support PHE's MSK Programme via the following workstreams:

Prevention

The aim of our prevention workstream is to ensure that everyone has the best possible bone health throughout their life.

This workstream focuses on actions to prevent people developing osteoporosis. We want to maximise peak bone mass during growth in children and young people and prevent premature bone loss in adults. There is much that people can do to look after their bones at all ages and osteoporosis is preventable in many cases. The key modifiable risk factors for osteoporosis are physical inactivity, insufficient calcium and vitamin D intake, and low body mass index. Our activities will focus on improving these modifiable risk factors particularly having a healthy diet with adequate calcium and vitamin D and undertaking physical activity beneficial to bone health.

Care

The aim of this workstream is that everyone who breaks a bone or is at risk of osteoporosis is assessed and managed appropriately.

This workstream focuses on our work supporting and influencing health and social care to deliver the most effective treatment and care. Ensuring healthcare professionals have the relevant knowledge, education and training to improve the quality of care is an important component in achieving this aim. We will support delivery of high quality care across organisational barriers, with a particular focus on osteoporosis care in primary care settings. We will also continue to support improvements in the early diagnosis and treatment of osteoporosis and be the first point of contact for all healthcare professionals involved in osteoporosis care.

Support

The aim of this workstream is to ensure that everyone with osteoporosis lives well and manages their condition in ways that best meet their needs.

This workstream focuses on supporting those who are living with a diagnosis of osteoporosis, those on the journey to diagnosis and family and carers. Our support includes products and services designed to support self-management through provision of information, education, support for lifestyle changes and peer support. Our support for lifestyle changes focuses on physical activity and nutrition.

Appendix 3: Data and Intelligence of MSK Conditions

MSK conditions accounted for more than 22.1% of the total burden of morbidity in England in 2016. Low back and neck pain were the leading causes of morbidity.²⁶ In 2017/18, 17% of adults reported a long-term MSK condition, ranging from 8.6% to 26.9% among local authorities in England. There are inequalities in the prevalence of long-term MSK conditions showing that the most deprived areas have a higher prevalence of MSK conditions than the least deprived (17.9% compared to 15.0%).²⁷

PHE's current activities

Public Health England, working in partnership with Versus Arthritis and other organisations, is working to increase the quality and availability of data about MSK conditions and the health and care services needed to address them. Data and surveillance should be used to understand MSK conditions in the population, monitor them over time and continuously drive improvement in health for people with MSK conditions.

PHE has produced indicators on a range of aspects of MSK health in the [MSK Fingertips profile](#) at a range of geographies, including England, region and local authority level. Data can be broken down by a range of inequality measures, such as deprivation decile groups, age, socio-economic status, ethnicity and religion, depending on the source of the data.

Data for these indicators comes from a variety of sources including primary and secondary care, as well as surveys. Confidence intervals are produced for these indicators and local authorities can be benchmarked against other similar authorities. The profile is updated bi-annually, usually in June and November.

The indicators presented in the profile provide information on different aspects of the MSK journey. They range from risk factors, through contact with primary care, to contact with allied health professionals, and the impact of the MSK condition. PHE has produced indicators on a range of aspects of MSK health in the [MSK fingertips profile](#).

What are the gaps?

There is no *systematic* collection, publication and analysis of data about the extent of MSK conditions in the population and the interventions that people need. Currently the indicators presented are from a variety of sources, but most of the data on prevalence of disease is modelled from other data sources. Systematic information on incidence, prevalence, treatment, referral and outcomes for the population and people with MSK conditions is urgently needed.

Many patients with MSK conditions are only seen in primary care or in allied health services. There is limited information on referrals to – and the availability of – services such as physiotherapy and occupational therapy.

Data are available on prescribing in primary care which includes what is prescribed, quantity and cost. However, information on secondary care prescribing data, particularly spend on biologics is limited.

Comprehensive patient and population outcome information, including the impact of MSK conditions on work and quality of life is not routinely available for most MSK conditions.

Future activity

A roundtable hosted by PHE in 2018 identified the following options for future work that are currently being explored and prioritised.

Explore data gaps and identify alternative means of collecting data

Alternative means of estimating the number of people with MSK conditions, their impact and their intervention requirements (predictive prevention initiatives), particularly about people who are seldom in touch with health services, are currently being explored.

To understand the extent of the provision of effective interventions for MSK conditions (identified through **PHE's return on investment tools**), PHE is working in partnership with stakeholders to collate data on the availability of these interventions across the country.

Better use of linked data, such as linked primary and secondary care data, linked Census and secondary care data, could allow further investigation into the outcomes for people with MSK conditions. For example, through increased understanding of multi-morbidity or the impact of MSK conditions on work and other aspects of quality of life.

Identifying local level data collections or studies that are used in the surveillance of MSK conditions and establishing how or whether they can be scaled up across the country would enable improvements in data collection from the bottom up.

Improve analysis and presentation of data

The PHE MSK Fingertips tool concentrates on gathering comparable information at local authority level but excludes useful information that is only available at national level. A national surveillance dashboard that presents a more comprehensive picture for England as a whole is being developed.

Explore the development of a health intelligence network

Development of a more formal partnership for the surveillance of MSK conditions, in line with the health intelligence networks for other conditions, would enable better sharing of information and knowledge about MSK conditions but would also ensure achievement of shared goals.

Appendix 4: Tools and Resources

Arthritis Research UK – Musculoskeletal Health A Public Health Priority in England

<https://www.arthritisresearchuk.org/system/search-results.aspx?keywords=public+health+report>

Arthritis Research UK – Musculoskeletal Calculator

<https://www.arthritisresearchuk.org/mskcalculator>

Arthritis Research UK – Musculoskeletal Conditions and Multimorbidities Report:

<https://www.arthritisresearchuk.org/policy-and-public-affairs/policy-reports/multimorbidity.aspx>

Arthritis Research UK – Public health bulletins

<https://www.arthritisresearchuk.org/public-health-bulletins>

Arthritis Research UK Resources: <https://www.arthritisresearchuk.org/policy-and-public-affairs/resources-for-policy-makers/for-healthcare-practitioners-and-commissioners/msk-hq.aspx>

Faculty of Public Health **Special Interest Group** for MSK

Falls and fractures

Consensus statement and resources pack

Guidance – Healthy places

<https://www.gov.uk/government/publications/phe-healthy-places/healthy-places>

LG Inform, a Local Authority MSK Health interactive platform to support health and wellbeing boards in understanding the local needs and service provisions for people with MSK conditions.

Living Well for Longer

<http://arma.uk.net/musculoskeletal-disorders-msk/living-well-for-longer/>

MECC Back Pain for clinicians

<http://meccback.co.uk/ahp-levels/level-3-mecc-musculoskeletal-clinicians-only/>

MSK Core Capabilities Framework

<http://www.skillsforhealth.org.uk/news/latest-news/item/689-new-musculoskeletal-core-capabilities-framework>

MSK Employers toolkit

MSK Fingertips tool

<https://fingertips.phe.org.uk/profile/msk>

MSK Hub

Designed to improve MSK services by channeling valuable information and experience to the right people.

MSK: Public Health Prevention

Muscle and bone **strengthening and balance activities** for general health benefits in adults and older adults

Musculoskeletal conditions: return on investment tool by PHE. A tool to help local commissioners provide cost-effective interventions for the prevention and treatment of musculoskeletal conditions

NICE **Encouraging people to be physically active**

PHE MSK Knowledge Hub – for up to date information and resources

Providing physical activity interventions for people with musculoskeletal conditions report

<https://www.arthritisresearchuk.org/policy-and-public-affairs/policy-reports/physical-activity-report.aspx>

RAND – **identifying promising practices in health and wellbeing at work**

Start active, stay active: report on physical activity in the UK

<https://www.gov.uk/government/publications/start-active-stay-active-a-report-on-physical-activity-from-the-four-home-countries-chief-medical-officers>

Supporting musculoskeletal (MSK) health at work

SWAP: delivering primary care vocational advice

The National Osteoporosis Society (NOS) has developed a **toolkit** in conjunction with the NHS to aid the commissioning of services that improve care of people with osteoporosis and fragility fracture.

Versus Arthritis – **Virtual Assistant**

Weight management: guidance for commissioners and providers

The following 7 separate interventions have previously been found to be cost-effective:

1. **Cognitive Behavioural Therapy** (CBT), including exercise – lower back pain
2. **STarT Back** (stratified risk assessment and care) – lower back pain
3. **PhysioDirect** – early telephone assessment and advice, all MSK conditions
4. **Self-referral to physiotherapy** – all MSK conditions
5. **YOGA** for Healthy Lower Backs (this is the name of the specific intervention)
6. **ESCAPE-pain** for knee pain
7. Vocational advice from physiotherapists in primary care

For queries relating to this document, please contact: msk.enquiries@phe.gov.uk

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