Nottingham and Nottinghamshire ICS

MSK to Elective Orthopaedics

Clinical and Community Services Strategy

March 2021

This information has been placed in the public domain in order to benefit patients across the country as we believe the experience and approach may be useful for others, however we request that acknowledgement to the work in Nottinghamshire is made and referenced in all materials. This helps us to understand the wider impact benefits of our programme. Please cite 'this work has been informed by the Nottingham and Nottinghamshire ICS' when referencing.

Contents

1. Executive Summary

The Integrated Care System (ICS) ambition across Nottinghamshire is to both increase the duration of people's lives and to improve the quality of those additional years, allowing people to live longer, happier, healthier and more independently into their old age. The aim of the Clinical and Community Services Strategy (CCSS) is to support the system to achieve this by shifting the focus of our health and care delivery from reactive, hospital based treatment models to a pro-active approach of prevention and early intervention, delivered in people's homes or in community locations where this is appropriate with a long term view of beyond 5 years.

Healthy muscles, joints and bones work together to produce good musculoskeletal (MSK) health to carry out daily activities with ease and without discomfort. MSK conditions now account for the largest cause of disability in the UK, with the burden of painful conditions falling disproportionately on those who are more deprived in society. Osteoarthritis and chronic joint pain affects over 8.75 million people in the UK, with over 30 million working days lost due to musculoskeletal (MSK) conditions every year in the UK, accounting for 30% of GP consultations in England and with orthopaedic surgery accounting for 25% of all surgical interventions in the NHS. An ageing population, alongside rising levels of obesity and physical inactivity will increase further the number of people living with painful MSK conditions. This will result in increasing numbers of people struggling to work and more people depending on health and social care services.

The NHS Long Term Plan (LTP) makes strong reference to reducing the risk factors that contribute to MSK conditions, with obesity amongst the top 5 Global Burden of Disease (GBD) rankings and physical inactivity another recognised risk factor. Secondary prevention is also highlighted as important to prevent deterioration of health, with a commitment to extend access to structured self-management programmes e.g. ESCAPE-pain to complement existing provision. The role of social prescribers and link workers is acknowledged with a commitment to increase roles to support referral to 900,000 people by 2023/24 to support developing tailored plans and connect people to local groups and services. Consideration to mental health as well as physical health is made with a commitment to Improving Access to Psychological Therapies (IAPT) for people with long term conditions (LTC). For people with LTC the NHS LTP aims to boost out of hospital care and achieve joined up care, contributing to the reduction in outpatient (OP) attendances by up to a third in the next 5 years. The NHS LTP aims to give people more control over their own health and more personalised care accounting for values and preferences and sharing control to meaningfully improve care outcomes. The plan commits to invest in primary and community services, including access to MSK First Contact Practitioners (FCP) working in primary care networks (PCNs) enabling access to the right professional, first time without needing a GP referral. For people who need an operation shorts waits are important. The NHS LTP makes a commitment to grow the amount of planned surgery year-on-year to cut long waits and reduce waiting lists. It also commits to pursuing a model which separates urgent and planned services to protect surgical capacity and reduce the risk of cancelled operations. Finally the NHS LTP makes a commitment for more joined-up and coordinated care, breaking down traditional barriers between care providers and teams

This Musculoskeletal (MSK) to Elective Orthopaedic service review has been undertaken as part of the ICS CCSS work stream. It has been supported by clinical experts and stakeholders in the development of place based service models for the future, to support the long term needs of our existing citizens. The review also focuses on embedding prevention in our population over the next 5-10 years, by shifting our culture from one of illness to one of healthier lifestyles and self-care.

The strategy identifies major stages in the journey and stresses a need to reorganise the way in which these services are delivered, from prevention through to longer term management. A whole pathway approach is crucial in order to maximise the clinical outcomes for patients, their quality of life and experience of services.

Key themes have been identified along with key transformational opportunities and potential impacts have been developed which include: prevention and education strategies to reduce risk, early detection and diagnosis to support early intervention; prehabilitation offer and configuration of inpatient care to support enhanced recovery; defined pathways for non-cancer referrals to navigate to the right expertise at the right time; access to expertise with enhanced community provision; Multi-disciplinary teams (MDTs) and opportunities for joint working for cancer and non-cancer to coordinate care and enhanced use of technology to connect the system.

A transformational 'Bridge to the Future' highlights current service offers across the ICS and identifies some potential long term next steps that can be taken to achieve the identified opportunities with proposed timelines and the expected outcome for our citizens of Nottinghamshire.

The recommended next steps are vital in keeping the momentum of change in the future offer of improved prevention and better mental wellness for our citizens; providing the right tools for our population to support their wellbeing; providing strong communication links for our staff is vital to enable them to provide the best care for our citizens; the most appropriate models of care in hospital settings, neighbourhood and home need to be provided equitably across the ICS and be provided using best evidence, flexibly and in a patient centred holistic way for them to fulfil their maximum potential throughout their lifetime.

2. Introduction

Background and Purpose	In Nottinghamshire we have made great progress in improving people's health and wellbeing. Today, we can treat diseases and conditions we once thought untreatable. However, our health and care system faces change and this will impact on our services, for example, the growing prevalence of long-term health conditions places new strains on our system. There is inequality evident in both the location of services and in access to services. In some areas, it is easier to access a GP or than in others, or to find things to do to enable citizens to stay active and fit. The ICS ambition across Nottinghamshire is to both increase the duration of people's lives and to improve those additional years, allowing people to live longer, happier, healthier and more independently into their old age. The requirement for a CCSS came from the recognition that to achieve this ambition the system has to change as a whole, rather than just in its individual acute, primary care, community and social care elements. It is recognised that only by working together to describe changes in how care is provided across the system, rather than through individual organisations, will we deliver the scale of change required.
The ICS Clinical and Community Services Strategy	The aim of the CCSS is to support the system to achieve this by shifting the focus of our health and care delivery from reactive, hospital based treatment models to a pro-active approach of prevention and early intervention. This should be delivered closer to people's homes or in community locations where this enables better prevention, more supported self-care and earlier intervention to support citizens. The Strategy recognises that achieving this change is a long term programme that will be delivered over the next 5 years and beyond. This is also to enable a necessary long term investment in the health and care buildings and infrastructure in the system. An overall CCSS whole life model framework has been developed to focus on the need to support people through their lives from living healthy, supporting people with illness and urgent and emergency care through to end of life care. Citizens can experience different parts of the system at different stages in their lives. With the development of the overall Strategy framework the next phase of work is to review the 20 areas of service across the ICS that collectively form approximately 80% of the volume of clinical work in the ICS. This will ensure that overall the Strategy is described as a coherent whole and generates a programme of change for the whole ICS. This review of MSK to Elective Orthopaedic Services provides the opportunity to be such a review and is part of the fourth phase of work.
NHS Long Term Plan	The NHS LTP is clear that to meet the challenges that face the NHS it will increasingly need to be more joined up and coordinated in its care; More proactive in the services it provides; More differentiated in its support offer to its individuals. The ICS has focused on describing 5 areas of focus for the delivery of the NHS LTP. These requirements are reflected in each of the service reviews that collectively will describe the CCSS **1. Prevention and the wider determinants of health -** More action on and improvements in the upstream prevention of avoidable illness and its exacerbations **2. Proactive care, self management and personalisation -** Improve support to people at risk of and living with single and multiple long term conditions and disabilities through greater proactive care, self-management and personalisation **3. Urgent and emergency care -** Redesign the urgent and emergency care system, including integrated primary care models, to ensure timely care in the most appropriate setting **4. Mental health** - Re-shape and transform services and other interventions so they better respond to the MH and care needs of our population **5. Value, resilience and sustainability -** Deliver increased value, resilience and sustainability across the system (including estates)

3. Approach and Scope

Approach	This strategy has been developed through an open and inclusive process which weaves together the expertise of clinicians and care experts with commissioners and citizens in determining the future shape of services across the system. There have been a variety of stakeholder and service user events to develop a clinical and community services model. An extensive system wide piece of work is taking place across a minimum of 20 services. The CCSS Programme Board have reviewed these services against a range of quantitative and qualitative criteria and agreed the fourth phase of seven service reviews. These include ENT and Hearing Services, MSK to Elective Orthopaedics and Personality Disorders. This document discusses the approach, scope, the key issues and potential transformational opportunities within MSK to Elective Orthopaedic services across the ICS. Health, social care, public health and the voluntary sectors have all been considered through reviewing the current service offer across the ICS. The service review was taken over approximately 10 weeks and there were two workshops held with stakeholders from across the ICS. An evidence review pack was developed which considered national and local best practice to inform the development of potential themes and new models of care where transformational change may take place across the ICS in the future.
Scope	For the purpose of the MSK to elective orthopaedic review, the following focus was agreed: **In scope:** • Age 16+ • Diagnosis, treatment and management of all conditions of the musculoskeletal system and connective tissue • Includes pathways to and out of elective orthopaedics • Prevention – Obesity/Physical Activity/Osteoarthritis • Prehabilitation and Rehabilitation **Out of Scope:** • Trauma / Pain Services / Spines – but connections will be described • Specialised commissioned services e.g. revision knee surgery – but referral pathways will be in scope • Children • Suspected Cancer / Sarcoma
Engagement	The MSK to elective orthopaedic service review has been supported by a tailored Steering Group involving stakeholders and clinical experts from across the ICS. They have provided expert advice, guided, confirmed and challenged assumptions throughout the period of review and connected to other workstreams. This group has formed part of the governance process along with the CCSS Programme Board. Two virtual workshops have been held enabling a wide breadth of stakeholders (Consultants, GPs, Physiotherapists, Occupational Therapists, other allied health professional (AHP), Versus Arthritis, Heads of Service, Commissioners and others) to be proactively involved in re-evaluating current service offers across the ICS, in developing potential themes and agreeing transformational change for the future Clinical and Community Services Strategy. Patient engagement has enabled confirm and challenge of assumptions and play an active part in the co-design of any future service changes across the ICS.

4. Contents

Strategy Development	This Strategy Document consists of five key elements. These have been developed through a process of design and iteration at the workshop and steering group meetings and includes key stakeholders from across the system. The strategy has been developed with reference to the Evidence Review document and the patient focus group that has been held.
Priorities for Change	The work of the Steering Group and the workshop stakeholders identified and confirmed four key areas of focus that need to change in the ICS for MSK to elective orthopaedics. These were based on a review of the current issues facing the ICS and the views of the Steering Group and workshop attendees. Service user experience has also been incorporated into the development of the strategy.
Proposed Future Care System	Following the initial engagement, at subsequent steering group meetings, attendees started to develop the future care system for MSK to elective orthopaedics to address the Priorities for Change. The future care system is described against two dimensions and aligned to the stepped care model: **Location** split between - Home (usual place of residence) – Hospital (including both acute and MH) with 24/7 medical presence – Neighbourhood representing all community/primary care and ambulatory care settings • **Urgency** split between - **Emergency/Crisis** requiring a service provided 24/7 to avoid crisis or risk to life – **Urgent** requiring a service 7/7 but not 24/7 to meet urgent care needs – **Planned/Scheduled** reflecting any arrangement where an appointment is agreed between a professional and a citizen The intention of the system model is to focus future care delivery closer to home and also with greater levels of scheduled care to best use the available resources and reduce demand on urgent and emergency care services. The new system to address the Priorities for Change is presented for each location and then summarised overall for the ICS.
Transformation Proposal	The Transformation proposal describes the key initiatives or programmes that are required to deliver this new model. As described earlier, for MSK to elective orthopaedic services, some of these programmes need to be developed in more detail. Namely, • **Priority** – What is the priority of the initiative in the view of the steering group and workshop attendees • **Alignment** – At what level of the system should we aim for a consistent approach for each initiative? This was split into two categories: ▪ Alignment to achieve **consistency** - In most instances this is ICS or Integrated Care Provider (ICP) level where with the greater value is perceived to be in an overall consistent approach. ▪ Alignment for **delivery** of the proposal - There are some instances where the recommendation is for delivery to be at ICP level, alternatively, it is at Primary Care Network (PCN) level where differential delivery would benefit the needs of very local populations • **Enabling Requirements** – What is required to enable each Programme to deliver? This includes workforce, technology, estate or service configuration. There are also requirements of culture or finance and commissioning to allow the system to work together differently • **Benefits and Costs** – Where available, the key benefits of the initiative at system level are summarised
Service Vision	The 'Bridge to the Future' was generated at a further virtual steering group meeting. It summarises the current challenges for the MSK to elective orthopaedic system in the ICS now (Priorities for Change), what the ambition is and the outline steps to get there. Progress with the 'Bridge to the Future' and the partnering vision can be returned to with stakeholders as the work develops to review progress.

MSK to elective orthopaedics key themes

Prevention & Optimisation

- Obesity
- Physical activity / mobility
- Prehab / rehab

Referral & Early Intervention

- Optimal triage, treatment & referral
- Patient driven outcome goals
- Early intervention practitioners

Sustainable Surgery

- Elective orthopaedic demand, capacity & backlog
- Elective ring-fencing & configuration

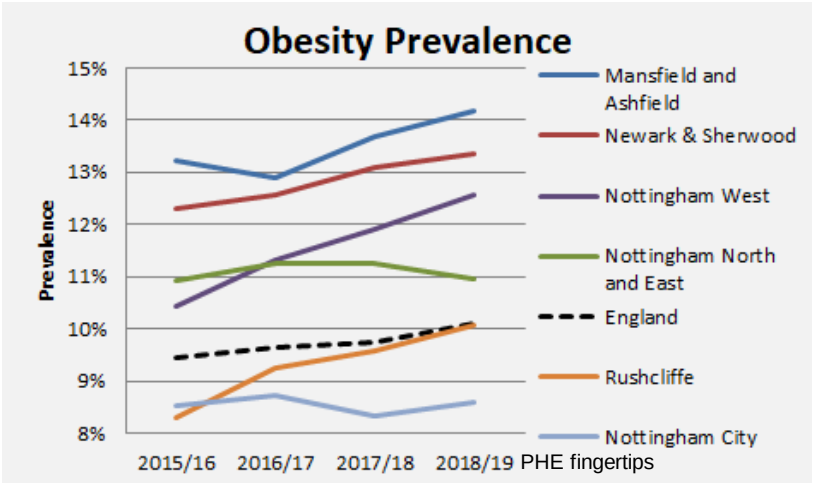
Whole System Approach

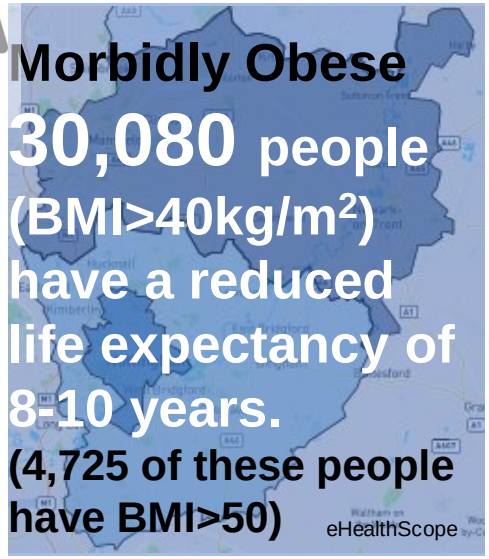
- Partnership working
- Integrated MSK pathway
- Physio model

Relationship of height, weight and body mass index to the risk of hip and knee replacements in middle-aged women B. Liu, A. Balkwill, E. Banks1 , C. Cooper2 , J. Green and V. Beral on behalf of the Million Women Study Collaborators

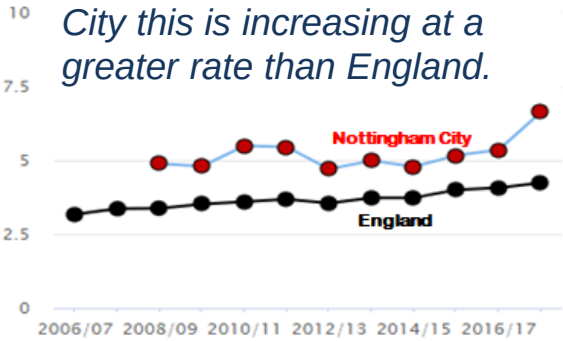
Obesity in our ICS:

Mansfield and Ashfield has one of the highest obesity rates in England.





The rate of **severe obesity in 10/11 year olds** is increasing. *In Nottingham City this is increasing at a greater rate than England.*



PHE fingertips

Nearly DOUBLE England's admission rate

Yet much less obesity prescription items and less than half the bariatric surgery

	Admissions (primary/ secondary diagnosis obesity) 2018/19	Admissions per 100,000 (primary/ secondary diagnosis obesity) 2018/19	Prescription items for obesity (Orlistat)	Prescription items per 1,000 population	Barriatric Surgery Admissions 2018/19	Barriatric Surgery Admissions per 100,000 2018/19
ENGLAND	**875,663**	***1,615***	**368,624**	**7**	**7,011**	***13***
NHS England Midlands and East (North Midlands)			**22,167**	**6**		
Nottinghamshire	**31,500**	***3,165***			**60**	***6***
NHS Mansfield and Ashfield	8,750	*4,407*	29	*0*	10	*4*
NHS Newark and Sherwood	4,095	*3,314*	137	*1*	-	*4*
NHS Nottingham City	8,805	*3,205*	2,713	*8*	25	*8*
NHS Nottingham North and East	4,465	*2,923*	558	*4*	-	*3*
NHS Nottingham West	2,975	*2,582*	337	*3*	15	*11*
NHS Rushcliffe	2,415	*2,055*	197	*2*	-	*4*

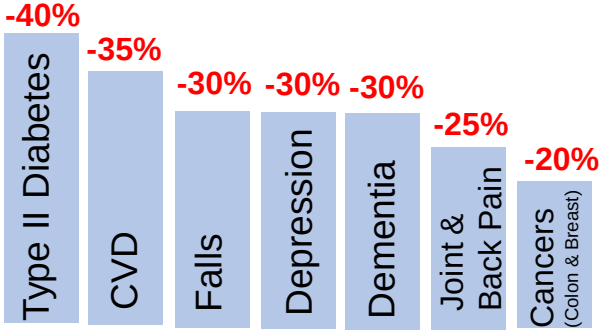
The burden of obesity isn't experienced equally across society. Obesity prevalence in the most deprived 10% of children is approx. TWICE that of the least deprived 10%.

NHS Digital

NHS Digital

Priorities for Change – Info-graphics

Physical activity reduces chance of



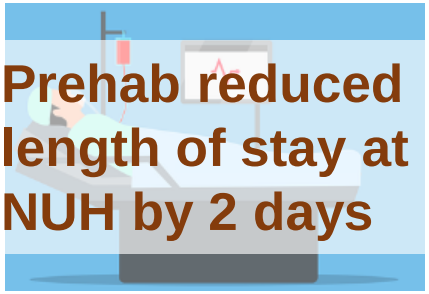
NICE recognises the role that physical activity can prevent and manage more than 20 different conditions.

NICE

Walking 6,000 steps per day protects against disability in people with or at risk of knee osteoarthritis

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4146701/

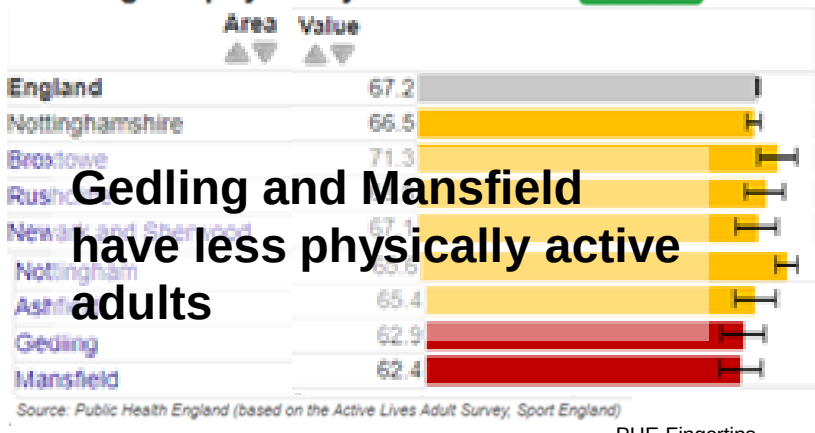
ESCAPE-pain NICE approved rehab - reduces pain & improves physical function **£1,417pp saving** on health & utilisation costs.



Prehab reduced length of stay at NUH by 2 days

Physically active older people are 1/3 less likely to have impaired walking

Percentage of physically active adults New data 2018/19

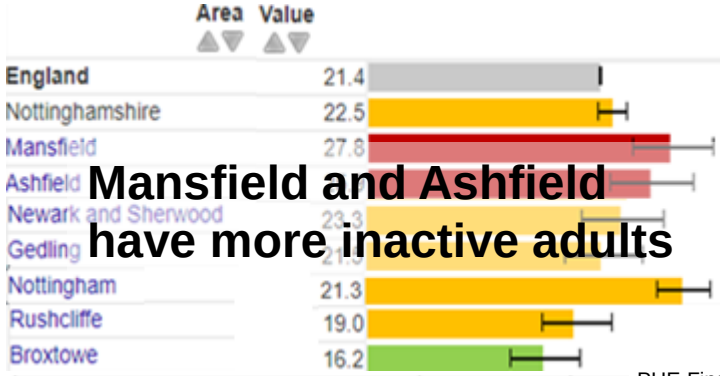


Gedling and Mansfield have less physically active adults

Source: Public Health England (based on the Active Lives Adult Survey, Sport England)

PHE Fingertips

Percentage of physically inactive adults 2018/19



Mansfield and Ashfield have more inactive adults

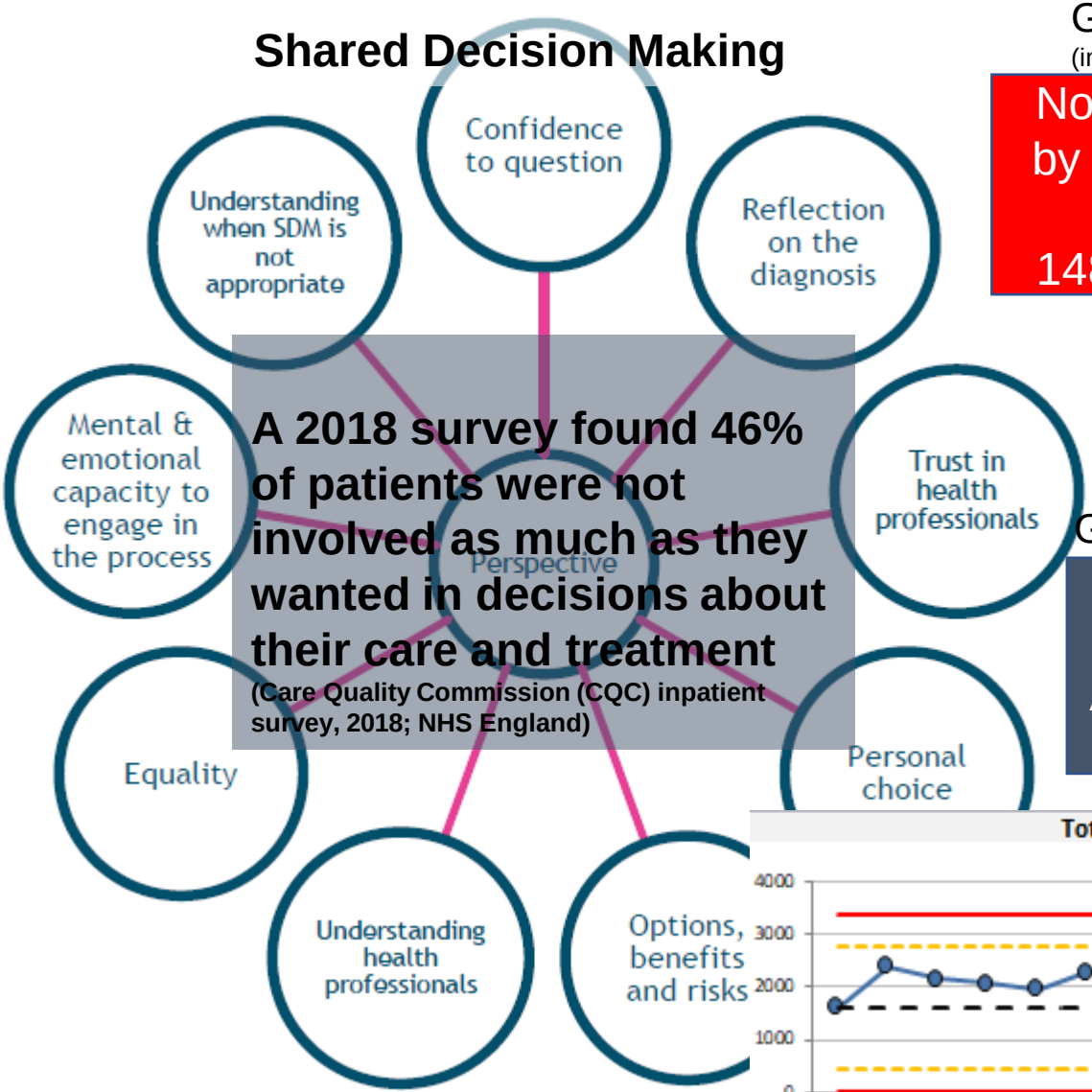
Source: Public Health England (based on the Active Lives Adult Survey, Sport England)

PHE Fingertips

67% of adults are active in England on average versus 47% of children. PHE Fingertips

Priorities for Change – Info-graphics

Shared Decision Making



A 2018 survey found 46% of patients were not involved as much as they wanted in decisions about their care and treatment
(Care Quality Commission (CQC) inpatient survey, 2018; NHS England)

Healthwatch Nottingham and Nottinghamshire
Shared Decision Making Focus Group Report

Greater Notts Triaging Hub 2019/20

(includes CONNECT):

Non-2WW by passing hub 1480 (3%)

Total Referrals into service 49,303 (97%)

13%

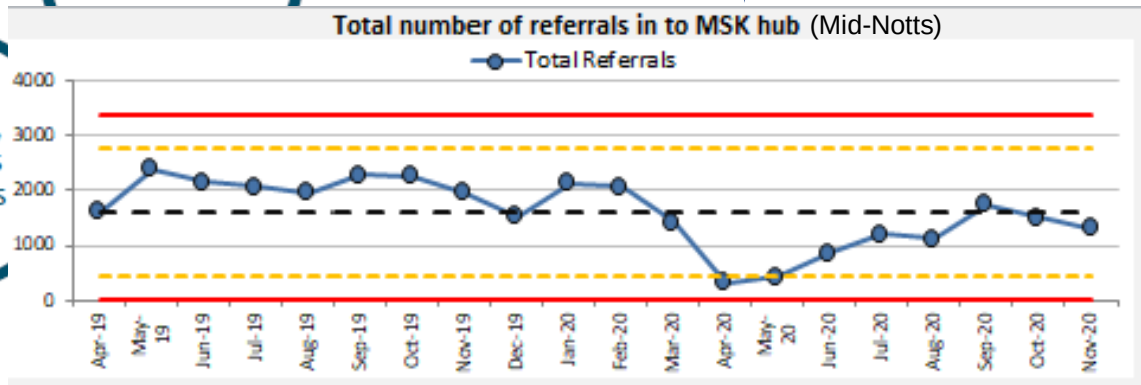
Secondary Care referrals 4,638

Greater Notts OPA 2019/20 (includes CONNECT):

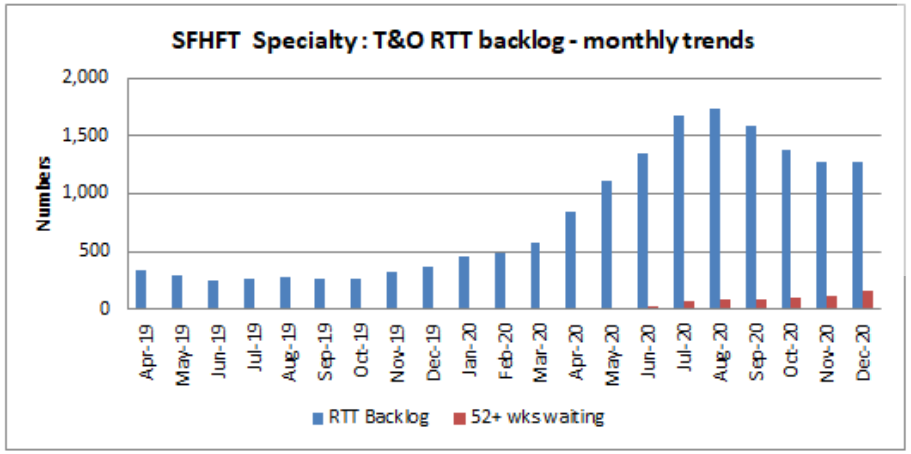
First Out patient Appointments 9,780

23%

Discharged after First OPA 2,246



Priorities for Change – Info-graphics



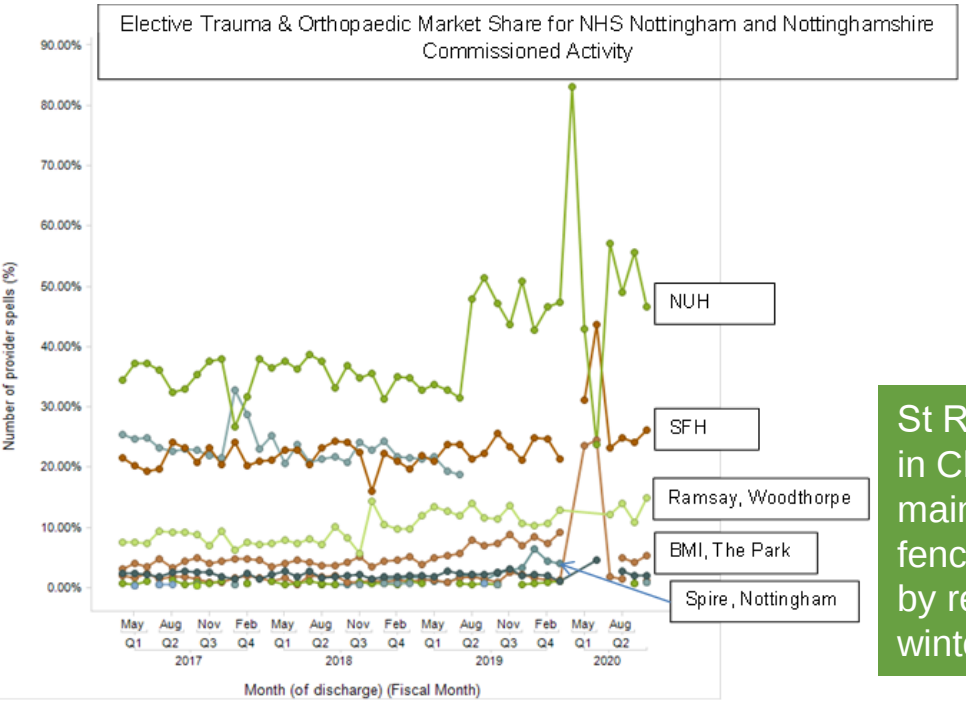
73% fewer operations in England April–Sept 2020 than April–Sept 2019.

British Orthopaedic Association

244,536 people were waiting over 18 weeks at the end of October 2020 (previously 100,000 at the start of 2020)

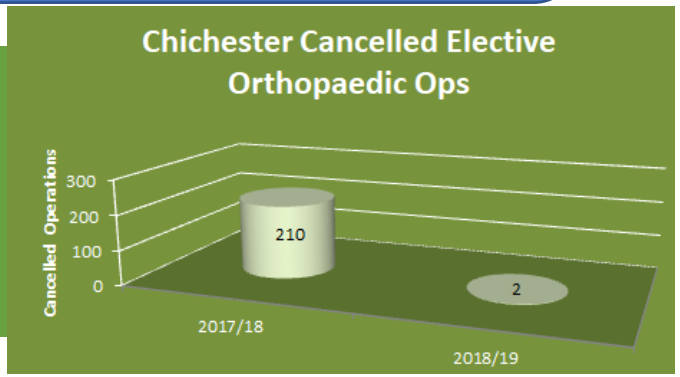
British Orthopaedic Association

In Oct 2020 in England, the number of patients admitted was 63% of normal (compared to Oct 2019). This was the lowest percentage of any surgical specialty. **British Orthopaedic Association**



There is clear evidence that when we allow arthritis patients to deteriorate to lower functional levels, they can still be improved by joint replacements but achieve lower post-operative function. **British Orthopaedic Association**

St Richard's Hospital in Chichester maintained a ring-fenced elective ward by relocation for the winter of 2018 GIRFT



5. Priorities for Change

The review identified 4 key areas of focus highlighting potential areas of change which include:

- Prevention & Optimisation (with a targeted education programme, helping to raise awareness of risk factors, targeting areas of inequality, promoting physical activity for primary and secondary prevention, signposting people to structured self-management programmes and a robust offer of prehabilitation, rehabilitation and reablement);
- Referral & Early Intervention (streamlining pathways with an equitable and consistent approach, entry to the MSK with consideration to the FCP role, single point of access and self-referral, a focus on patient driven outcomes goals, navigation and access to the right care first time and supporting self-management including patient initiated follow-up);
- Sustainable Surgery (developing optimal capacity to enable year round operating, separation of 'hot' and 'cold' activity, ring-fencing to mitigate winter pressures, effective use of capacity across NHs and independent sector);
- Whole System Approach (developing an integrated MSK MDT to support seamless and coordinated care, defined capabilities across health and care, enhanced public awareness of skills and knowledge, education, training and shared decision-making, technology to support visibility and access to information).

Prevention & Optimisation	Rising levels of obesity, combined with an ageing society, could lead to a near-doubling in UK prevalence of osteoarthritis (OA) by 2035. Obesity substantially increases risk of OA e.g. twice as likely to develop OA of the knee and 14 times for likely to develop knee pain. This corresponding to an increase in the need for joint replacement surgery e.g. 2 to 3 knee replacements and 1 in 4 hip replacements in middle–aged women are attributable to obesity. Joint replacement procedures are equally effective for people who are obese or of normal weight, but morbidly obese people benefit less from the procedure. A joint replacement lasts less than 5 years for more than 1 in 10 morbidly obese people having surgery. Obesity also results in increased surgical complications including: longer hospitals stay, increased complications and higher re-admission. Weight loss improves symptoms and may slow progression of OA, with a 10% weight loss leading to substantial improvements in symptoms. Locally, there are 30,080 people with a BMI> 40kg/m^2, 4,725 of which have a BMI > 50kg/m^2, but with services to address obesity inconsistent and limited. On average 67% of adults and 47% of children are inactive in England, with physical inactivity another key risk factor. Physical activity that meets national guidelines has considerable health advantages, such as maintaining a healthy weight, managing stress and improving quality of life. It also has a role in preventing and managing up to 20 different health conditions. For MSK pain walking 6,000 steps per day protects against disability in people with knee arthritis and physically active older people are one third less likely to have impaired walking. All healthcare professionals are advised to initiate discussions about physical activity as part of routine care, with different approaches available to increase physical activity, from general, self-determined activities to specific therapeutic exercises. A structured self-management programmes e.g. ESCAPE-pain is evidenced to reduce pain and improve physical function. It is recommended for people with osteoarthritis to support secondary prevention, with the NHS LTP supporting extended access to digital programmes to complement existing provision. A public health approach to prevention enables people to take steps to maintain and improve health, both individually through behaviour change approaches and health promotion activities to address social and environmental factors. Opportunities exist to work in partnership, for example with Active Notts, to increase public awareness and support prevention. Access to services is also required to address risk factors. Prehabilitation is the practice of enhancing health prior to surgery with the aim of improving outcomes, with the period before surgery a teachable moment to enable lifestyle change. Poor physical fitness predicts adverse surgical outcome, with one third of surgical populations inactive. Assessment of cardiopulmonary testing (CPET) supports risk stratification and underpins the development of shared decision-making plans and delivery of exercise interventions. Signposting to lifestyle and psychological interventions e.g. smoking cessation, weight management further optimising health. Social prescribers and link workers can help deliver tailored plans and connect to local groups and services. Several multimodal prehabilitation programmes are underway in the UK to support developing a prehabilitation model for the ICS. A risk stratified approach provides an opportunity to offer different modes of delivery across settings and build on existing services, such as local gyms and fitness instructors. Postoperative rehabilitation is recommended 24 hours after surgery to improve joint motion and strength, gain independence and support wider activities of daily living to support timely discharge.

Referral & Early Intervention	MSK triage provides a single point of access for MSK referrals. It provides specialist clinical review of incoming referral and supports triage to the most appropriate setting for further treatment and/or diagnosis. The overall aim of MSK triage being to avoid inappropriate referrals, improve the quality of referrals and ensure that people with MSK problems are directed to the right care setting, first time. Nationally, MSK clinical review and triage aims to reduce demand on local secondary care services with the potential to reduce referrals by 20-30%, supporting the NHS LTP ambition to reduce outpatient appointment by up to a third over the next 5 years. Standardised pathways and referral templates improve the quality of referral and underpins effective triage and complements a single point of access. Locally, South and City ICP triaging hub received 97% of referrals, with 13% of these referred to secondary care. Of first appointments 23% were discharged at first appointment. The establishment of triage by the Mid-Notts MSK Together Alliance has demonstrated a 30% reduction in referrals to secondary care, with an increased conversion rate to surgery from 25% to over 50% (demonstrating a reduction in inappropriate referrals to secondary care). Opportunities exist to develop a consistent approach across the ICS, including connections between multi-disciplinary team (MDT) members in the triage process, such as Advanced Clinical Practitioners (ACPs), GPwER and the role of Sports and Exercise Medicine and Orthopaedic Consultants in complex presentations. Consideration to communication and interfaces enables visibility and access to information across settings e.g. access to diagnostic imaging and connection to EMRAD, supporting decision-making and navigation. Shared decision-making enables individuals and clinicians to work together to understand and decide what tests, treatments, management and support packages are most suitable bearing in mind a person's individual circumstances. A 2018 survey found that 46% of patients were not involved in their care and treatment. 43-61% of the population in England do not understand the health information they are given, with lower levels of literacy in deprived communities an important consideration in shared decision-making conversations. Delivery of shared decision-making aligns with the NHS LTP aim to give people more control over their health and more personalised care accounting for values, preferences, personal goals and sharing control to meaningfully improve care outcomes. It empowers people to take responsibility for their own health and wellbeing to improve quality of life by enhancing patient activation. It is evidenced to improve outcomes, lower rates of hospitalisation and increase levels of satisfaction whilst enhancing efficiency and reducing unwarranted variation. Patient activation also supports opportunities to deliver follow-up in a different way, including the principles of patient-initiated follow-up (PIFU). Locally, shared decision-making is in widespread use, with access to decision aids to support conversations and a collaborate score to support monitoring in practice. Opportunities exist to develop a consistent approach across settings and at the same time increase awareness of citizens and professionals of the principles. Further opportunities exist to develop agreed outcome measures to support further service developments, including opportunities to develop the principles of patient initiated follow-up. Patients presenting with MSK conditions make up 30% of primary care consultations. FCP physiotherapists have advanced competencies and skills to assess, diagnose, and manage MSK problems. They enable patients who usually present to their GP to see a FCP in general practice, bringing physiotherapy expertise to the front end of the MSK pathway. Enabling referral to a FCP can speed up access to treatment, reduce GP workload and associated costs, reduce prescription costs, increase self-management and reduce inappropriate referrals to secondary care. An effective FCP service delivers a return in investment (ROI) of £0.87-£2.37 for every £1 spent. Delivering an effective FCP service requires appropriate care navigation and inclusion in the pathway for MSK services. It also requires consideration to the skills and capabilities associated with levels of practice characterised by high autonomy and complex decision-making. Skills may include independent prescribing, injection therapy and imaging expertise gained through masters level study and breadth of clinical experience. Effective governance arrangements are key to success and sustainability with consideration as part of the local MSK pathway. The NHS LTP commits to ensuring that patients have access to a MSK FCP, expanding the number of physiotherapists working in PCNs, enabling access to the right professional, first time without needing a GP referral. Locally, the majority of PCNs have opted for at least 1 FCP. Currently access is not equitable across all PCNs, with multiple practice operating models impacting on care navigation. Other considerations include education, training and leadership support to new roles underpinned by robust governance arrangements. Additional consideration is required to alignment with MSK triage, with the development of defined pathways, communication and levels of supports, with clear outcomes to measure and evaluate impact and success.

Sustainable Surgery	Orthopaedic surgery accounts for over 25% of all surgical interventions in the NHS, and this is set to rise over the next ten years. For people who need an operation short waits are important. Joint replacements help people stay independent and yield important quality of life gains. The NHS LTP makes a commitment to grow the amount of planned surgery year-on-year to cut long waits and reduce waiting lists. In March 2020, all non-urgent elective operations and outpatient clinics were cancelled due to the COVID-19 pandemic. In England, between April and Sept 2020 212,000 (73%) fewer operations occurred than in the same period in 2019. By Oct 2020 in England the number of patients admitted was 63% of normal (compared to Oct 2019). As a consequence there have been huge rises in the number of people on the waiting list for extended periods. Patients waiting 18+ weeks at the end of October stood at 244,536 (previously 100,000 at the start of 2020). The number of patients waiting over a year was 436 in January 2020 and has now reached over 34,978 (October 2020). Many people avoided healthcare settings during the pandemic. Referral rates have not returned to pre-pandemic levels, currently at 65-70%, with 614,000 fewer referrals to orthopaedics than the same period the year before; with a predicted delayed surge of patients presenting to primary care with more advanced MSK disease, causing additional workload in the future. Delays to treatment affect outcomes, fitness for surgery, wider social impacts linked to inability to work and becoming reliant on care, quality of life and consequences to mental health. Orthopaedic elective surgery is categorised in priority 4 category (procedures do not need to be performed within 3 months) and continued prioritisation in a similar way will continue to place orthopaedic surgery in low-priority, with the British Orthopaedic Association (BOA) strongly believing that surgical delivery needs to be prioritised. Locally, at NUH the elective orthopaedic waiting list is 2500+. To run at a 'normal 18 week wait' (a wait list of about 1000), it could be 2024 before a return to the pre-pandemic position. This does not include the potential delayed surge in activity. SFHT backlog is similar, with in excess of 1,500 patients awaiting surgery, again with patients waiting in excess of 52 weeks. The original GIRFT report 2012 made a recommendation for a genuine elective orthopaedic ring-fence that is rigidly enforced and essential if best outcomes are to be achieved. Since the original report 40.3% of applicable trusts reported that ring-fenced provision of orthopaedic beds is provided, despite unprecedented pressures on bed capacity. A further 56.6% of trusts have agreed to take this forward. Ring-fenced beds offer clinical benefits including a reduction in surgical site infections. Whilst this is influenced by a number of factors, it is likely that the maintenance of ring-fencing has contributed to the decreasing infection rates in the orthopaedics specialty. Ring-fencing also protects elective operating capacity during times of operational pressures, such as winter. An example of successful ring-fencing has been seen in Chichester where the trust avoided a significant number of elective lists being cancelled by maintaining a ring-fenced ward, whilst having flexibility to manage an increased emergency workload. During 2018/19 only 2 lists were cancelled, in comparison to 210 in 2017/18.The BOA endorses the need to provide a continuous, safe elective orthopaedic environment by providing a sufficient and stable bed base for effective year round operating. This optimises resource by securing admission, preventing cancellation due to lack of capacity, co-locating key staff, optimising discharge and minimising adverse events, particularly implant infection. Ring-fencing is central to this concept to secure a bed-base for the exclusive use of orthopaedic patients in a safe environment to improve outcomes. The original GIRFT report 2012 also made a recommendation for the creation of a 'cold' elective orthopaedic centre, either within an existing hospital environment or separate on the same site. Since the original report 33.7% of applicable trusts have created a 'cold' elective orthopaedic centre, either within an existing hospital environment or separate on the same site. A further 41% of trusts have agreed to take forward this action. The implementation of a 'hot and cold' site split has proved transformative for several trusts. By separating their 'hot' unplanned emergency work from their 'cold' planned elective work, trusts have seen reductions in average length of stay e.g. 4.23 days to 4.12 days for hip replacement, 4.85 days to 4.2 days for knee replacement. A reduction in cancellations of on the day of surgery has also been evidenced from between 10 and 25 per month to less than 5 on average. Elective performance has also been evidenced to increase despite winter pressures e.g. performing 19% more limb joint replacement surgery after reconfiguration. GIRFT remains committed to supporting trusts in implementing this model. The recommendations made by GIRFT are supported in the NHS LTP, stating that separating urgent from planned services makes it easier for NHS hospitals to run efficient surgical services by protecting capacity and reduce the risk of cancelled procedures. NHS LTP therefore makes a commitment to support hospitals to pursue this model. Locally, operating capacity within the ICS is split across NUH, SFHT (Kingsmill and Newark), Woodthorpe, The Park and Spire Hospitals. Consideration is required to capacity in the system, including inpatient and day case across the NHS and independent sector. Fundamental to the approach is the implementation of recommendations regarding separation of 'cold' activity and ring-fencing to maintain elective orthopaedic capacity year round.

Whole System Approach	Service provision for MSK nationally is complex and variable. Services exist across sectors, involve multiple professions and are delivered across a range of providers, often leading to unwarranted variation. Delivery of the best lifelong MSK health within all communities requires evidence-informed, personalised and high quality healthcare valued by all. Nationally-agreed best practice clinical pathways and guidance exists for MSK, but with opportunities to enhance collaboration and share continuous learning. Working in partnership supports the achievement of person-centred coordinated care. This includes working collaboratively between and across the person using MSK services, their families and carers, all providers across primary, community and secondary care, physical and mental health services and social care and voluntary care sectors. The NHS LTP makes a commitment to more joined-up and coordinated care, breaking down traditional barriers between care providers and teams. Opportunities therefore exist to bring professionals together across providers and settings to support the delivery of person-centred coordinated care; an example locally being the MSK Together Alliance. Systems need to be developed to support effective communication between primary, community, secondary and social care providers and with the patient to support decision-making and seamless transition of care. This requires innovative use of technology to provide care closer to home where appropriate. Some investments have been made to help tailor solutions for the ICS including sharing of patient information through platforms such as patient knows best (PKB). Further consideration is required to develop interfaces across multiple systems to support visibility of information to support decision-making. Enabling person-centred coordinated care by collaborative working is the first step to achieving local integrated MSK delivery. A personalised approach which recognises shared-decision making is fundamental, with consideration to the preferences, circumstances and goals of the individual and supports self-management. A population health management approach ensures resources reach individuals and communities and addresses health inequalities. System wide monitoring of access, patient outcomes and experience informs decisions to meet the needs of the population at place level. Information will provide intelligence for continued value improvement. An integrated MSK pathway supports the application of local guidance to navigate to the right interventions and expertise at the right time. This includes urgent situations requiring onward referral to secondary care and the best use of diagnostics. Consideration should be given to the five transformation domains for MSK and include: prevention, triage and assessment, long term conditions and rehabilitation, diagnostics, planned secondary care. An integrated MSK pathway also supports the development and implementation of a collaborative education and professional development strategy. This ensures access to the skills and capabilities of members of an integrated MSK multi-disciplinary team (MDT), including support for the implementation and development of FCP roles and possible GPwER role. The pathway for MSK is inconsistent across the ICS. For example, referral criteria are not uniform, there are different approaches to the development of FCPs and GPwER and inclusion of Sports and Exercise Medicine and Orthopaedic Surgeon in the MDT. Opportunities exist to develop an integrated MSK MDT capturing the capabilities and expertise of professions to support the delivery of person-centred coordinated care, enabling timely access to care and supporting seamless transitions and lateral pathways to the right service at the right time in the right setting aligned with personal goals and outcome measures described. Physiotherapy management and rehabilitation are priorities for restarting services following the COVID-19 pandemic. MSK is the largest population group treated by physiotherapists, with evidence-based physiotherapy interventions effective and value for money in the management and treatment of MSK disorders. Rapid access to MSK physiotherapists reduces the amount of time people are off work and is vital in preventing a new acute problem becoming chronic and long lasting. Physiotherapists provide support across the MSK pathway in all settings and in a variety of roles e.g. FCP, ACP. However, access to physiotherapy and interventions delivered are inconsistent across the ICS. There is also the inability to refer/transfer between settings e.g. referral and discharge between acute and community settings. Different referral criteria, contractual arrangements and access to estates contribute to the difference in physiotherapy provision. Developing a consistent approach within the Integrated MSK framework supports navigation to the right expertise in the right setting first time and optimise the role of the physiotherapist.

6. Proposed future care system

Home

Planned/Scheduled

Urgent – 24 hours

Emergency/Crisis – 4 hours

Prevention & Optimisation – Obesity. Physical activity/mobility, Prehab/rehab

- Public health approach to support lifestyle change e.g. Green Parks Project, planning permissions for retail outlets
- MECC to support timely conversations and everybody's responsibility
- Signposting to virtual and F2F lifestyle interventions e.g. social media videos and groups, Apps, peer support for exercise and weight management
- Telehealth– virtual access to advice, information and images – consider people with additional communication needs
- Population Health Management approach to identify people with higher risk factors
- Resources for MSK to promote prevention and self-management opportunities - use of NHS App/PKB – approved and trusted resources to signpost to advice and services
- Access to structured self-management programme e.g. ESCAPE-pain digital tools
- Targeting hard to reach communities and providing access to information in arrange of formats in a range of settings e.g. community centres, libraries, voluntary organisations
- Advice, support and resources to help self-management, including mental health – IAPT for mental health and chronic pain
- Understand barriers e.g. reading abilities
- Work with charities and voluntary groups to enhance access to those that can't engage
- Versus Arthritis (Arthritis Research UK and Arthritis Care) – access to information in range of formats e.g. braille, different languages
- Peer support e.g. Versus Arthritis - free helpline to support prevention and self-management and sharing of patient stories
- Home based prehabilitation programmes motivational, lifestyle, exercise, psychology, diet

Sustainable by:

- Increased prevention, self-care and independence
- Optimising health to reduce healthcare utilisation

Referral & Early Intervention – Optimal triage, treatment & referral, Patient driven outcome goals, Early intervention practitioners

- Consistent access to self-referral to MSK pathway
- Options to self-refer
- Shared consent as part of SDM - patients aware they can share their consent so practitioners can see their records.
- Delivering personalised/individualised care
- Understanding patient goals and outcomes
- Telehealth - with access to assessment, advice and information
- Signposting to Decision Support Tools e.g. Versus Arthritis to support SDM principles and give time to consider information to make decisions and align with patient's own goals and wishes
- Access to Patient initiated FUP (PIFU) across the system

Sustainable by:

- Earlier intervention and enhanced patient activation supporting self-management

Whole System Approach – Partnership working, Integrated MSK pathway, Physio model

- Central repository of information and services for MSK
- Interfaces to connect systems to support coordination of care and consideration of the patient as a whole
- Virtual connections between the integrated MSK team and the patient to support decision-making
- An MDT approach

Sustainable by:

- Promoting self-care and independence through enhanced shared decision-making
- Reduces OP attendances

Referral & Early Intervention

- AI enabled triage platform that can facilitate home management and redirects to 111 quickly if there are red flags – consistent access across the system
- Education of patients and the public on when and who to contact in an urgent situation

Sustainable by:

Colour KEY to information source: Steering Group/ Workshop 1 Evidence Document/ Guideline Patient Engagement

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6. Proposed future care system

Neighbourhood

Planned/Scheduled

Prevention & Optimisation – Obesity. Physical activity/mobility, Prehab/rehab

- Making Every Contact Count seen as everyone's responsibility - educate HCPs to raise awareness so that these conversations happen earlier and support appropriate signposting to support
- Health checks to identify risk factors and support prevention at an early stage
- Signposting to dietary advice and with access to unified weight management pathway
- Help with weight loss with access to advice and support
- Supporting self-management across the pathway – providing information and signposting e.g. exercise referral schemes to support achieving goals
- Access to exercise classes
- Social prescribing to signpost to the right information, advice and support
- Early Identification of prehabilitation needs and signposting to the right support in the right settings aligned with risk – learn from other centres
- Links with councils /gyms and using existing fitness instructors and exercise referral schemes
- Education and training of exercise fitness instructors to support prehabilitation offer

Sustainable by:

- Increased prevention, self-management and optimisation reducing healthcare utilisation

Referral & Early Intervention – Optimal triage, treatment & referral, Patient driven outcome goals, Early intervention practitioners

- Education of GPs and HCP to support quality of referrals and a consistent triage process
- Streamline triage process to identify people who need referral to elective orthopaedics and navigate to the right service and treatment
- Seamless transitions between services in the pathway to prevent fragmentation and lengthy stays through the triage process
- Access to a range of treatments and access to specialist services
- Diagnostics complete and visible at entry to MSK triage- defined in pathways and protocols but need to be consistent and appropriate for all MSK sites e.g. MRI not US for shoulder
- Opportunity to discuss triage outcomes in an MDT environment to support navigation
- Enhancing patient awareness of specialist opinion and that in many cases this will not be an orthopaedic consultant – raising profile of physiotherapy, ACP, SEM consultants
- SDM support for complex presentations to determine patient goals, inform triage and onward referral and support self-management
- Increasing patient and professional awareness of SDM principles
- Defining pathways and a consistent model for FCP – including education, governance
- Interfaces between IT systems as multiple systems to navigate

Sustainable by:

- Earlier diagnosis and intervention by the right person first time aligned to individual goals

Sustainable Surgery – Elective orthopaedic demand, capacity and backlog, Elective ring-fencing and configuration

- Optimising patients on waiting list for surgery – offering prehabilitation with attention to psychosocial issues as well as physical

Sustainable by:

- Optimising health by preventing deconditioning to reduce healthcare utilisation

Whole System Approach – Partnership working, Integrated MSK pathway, Physio model

- Integrated working to support seamless service delivery across settings and coordination of care – to include an integrated MDT with defined roles to support decision-making
- Consistent pathway and referral routes to support consistent and collaborative working
- Opportunities for education, training and shared learning
- Different IT systems in use – interfaces across the system

Sustainable by:

- Supports consistent and coordinated care

Urgent – 24 hours

Referral & Early Intervention

- Education of MSK triage and FCP to support signposting for urgent interventions

Sustainable by:

- Earlier intervention

Emergency/Crisis – 4 hours

Colour KEY to information source: Steering Group/ Workshop 1 Evidence Document/ Guideline Patient Engagement

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6. Proposed future care system

Acute

Planned/Scheduled

Prevention & Optimisation – Obesity. Physical activity/mobility, Prehab/rehab

- Visibility of prehab and rehab interventions to identify people that need surgery
- MECC to enable prevention at every point in the pathway
- Lifestyle interventions and psychological support accessible and with consistent awareness of where to signpost
- Frail elderly – bring together SCOPES and prehabilitation as one model
- SEM/EO expertise for complex presentations to optimise prehabilitation
- Define links between community and acute rehabilitation e.g. links to Active Hospitals Programme (NUH) – avoid linear referral pathways
- Intensive support for people on waiting lists to support determining priority for surgery e.g. weight management and exercise – consider pausing RTT for clinical observation e.g. 12/52 weight loss programme – integrating across acute and community +/- peri-operative care hubs

Sustainable by:

- Increased prevention, self-management and optimisation reducing healthcare utilisation

Referral & Early Intervention – Optimal triage, treatment & referral, Patient driven outcome goals, Early intervention practitioners

- SDM needs to be bespoke and embedded in all services with threshold to referral
- FCP/GP able to refer directly to identify who require surgery quickly
- GPwER role with training and development provided locally consistent with RCGP accreditation linked to Advanced Practice Roadmap via FSEM and PCRMM
- Where less clear whether need/benefit of surgery ensure all elements of pathway have been considered and information visible to support decision-making
- Standardise information on F12 as baseline to include all care delivered prior to referral to pull into pre-op assessment
- Diagnostic images visible and available on EMRAD
- Interface s and data sharing across settings to support visibility of records
- Proactive and intensive prehabilitation with RTT pause for clinical observation

Sustainable by:

- Earlier diagnosis and intervention aligned to individual goals

Sustainable Surgery – Elective orthopaedic demand, capacity and backlog, Elective ring-fencing and configuration

- Ring fencing of elective orthopaedic beds to support year round operating
- Cold operating facility ideally within current sites – considering interdependencies
- Avoid deconditioning with integration of prehabilitation through to people on waiting list
- Effective use of capacity across NHS and independent providers
- Access to Integrated MDT to support while on waiting list
- Reduced waiting lists
- Support after discharge, during recovery and access to follow-up

Sustainable by:

- Earlier access to intervention and optimisation to reduce healthcare utilisation

Whole System Approach – Partnership working, Integrated MSK pathway, Physio model

- Integrated working across the system with defined transitions for long waiters
- Pathways to support seamless transitions between settings across the system
- MDT function within integrated model – with defined capabilities and a consistent approach to engaging and including SEM , GPwER and EO consultants
- Co-located MDT with providers – virtual and F2F for examination – administrative support
- Defining physio pathway with a consistent approach and ability to refer between settings
- Continuity and coordination of care

Sustainable by:

- Supports coordination of care

Urgent – 24 hours

Referral & Early Intervention

- Direct referral for 'hot' elective patient e.g. torn tendon to bypass triage- requires
- Same day access to assessment for urgent MSK cases
- Direct number to on call team to ensure signposting to the right place in an urgent situation
- Rapid access clinics for timely assessment

Sustainable by:

- Earlier diagnosis and intervention

Emergency/Crisis – 4 hours

Referral & Early Intervention

- Access to on-call team for assessment and treatment

Sustainable by:

- Earlier diagnosis and intervention

Colour KEY to information source: Steering Group/ Workshop 1 Evidence Document/ Guideline Patient Engagement

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Integrated Care System
Nottingham & Nottinghamshire

Future Care System – Summary

www.healthandcarenotts.co.uk @NHSNottingham

Availability	Acute/ MH Hospital	Neighbourhood	Home
4 hours or less / 24/7	• Access to on-call team for assessment and treatment		
Urgent Care/ within 24 hours / 7 days	• Direct referral for 'hot' elective patient e.g. torn tendon to bypass triage • Same day access to assessment for urgent MSK cases • Direct number to on call team to ensure signposting to the right place in an urgent situation • Rapid access clinics for timely assessment	• Education of MSK triage and FCP to define urgent pathway and navigate to the right intervention in a timely way	• AI enabled triage platform – facilitates home management and redirects to 111 if there are red flags • Education of patients and the public on when and who to contact in an urgent situation
Level of Care: Scheduled / Appt based	• MECC to enable prevention and signposting – link with prevention steering groups • Prehabilitation offer (combined with SCOPES) - including for people on waiting lists with pause for clinical observation – integrating Active Hospitals programme and across community with oversight by MSK MDT • Standardised information on e-referrals to include diagnostic imaging, outcome measures and all care delivered prior to referral – visible to all (EMRAD) • Direct referral with clear pathway for people requiring early surgery • SDM bespoke and embedded in all services – with increased awareness of principles • Education, training and support within the integrated MSK MDT environment • Ring fencing of elective orthopaedic beds to support year round operating • Cold operating facility ideally within current sites – investment and strategic direction to support configuration • Effective use of capacity across NHS and independent providers • Integrated MSK MDT with defined capabilities, consistent pathways and referral routes to navigate to the right settings with a consistent approach to engaging SEM and orthopaedic consultants • Enhanced use of technology to connect the MDT (with consideration to F2F examination) with opportunities to deliver PIFU with oversight • Defining physiotherapy pathway e.g. post-operative rehabilitation, with a consistent approach and ability to refer between settings • Principles of seamless transitions and care coordination to avoid linear pathways	• MECC everyone's responsibility – educating HCP to support earlier conversations • Promoting health checks to identify high risk factors • Signposting and access to a unified weight management pathway and interventions to support self-management e.g. exercise referral schemes • Enhancing prehabilitation in community (including councils and gyms) with a risk stratified approach – optimising existing support with training e.g. fitness instructors • Active health clinics for people with more complex needs - SEM consultant support • Extending prehabilitation offer to people on waiting lists to prevent deconditioning • Consistent approach to the navigation of referrals– with education of GPs , FCPs and HCP to navigate to the right service and treatment • Diagnostics defined in pathways – complete & visible • SDM embedded to inform triage, onward referral and self-management – with the inclusion of outcome measures • Support to implement FCP role at a local level, integrate in MSK MDT and develop networks across primary, community and acute settings • Providing comprehensive information on referrals to social care to support reablement provision • Develop an integrated MSK MDT with defined capabilities, pathways and referral routes to navigate to the right settings and support • Social care input to MDT to ensure ongoing support • Enhancing patient awareness of skills and knowledge of MDT e.g. advanced practitioners • Opportunities to support education, training and shared learning to deliver a consistent approach • Interfaces across IT systems to coordinate care between the MDT and with the patient	• Public health and healthcare working together to support lifestyle change • Working with 3rd sector e.g. Active Notts to make physical activity the norm • MECC to support timely conversations • Population Health management approach to identify higher risk factors • Signposting to lifestyle interventions and rehabilitation e.g. exercise referral schemes, ESCAPE-Pain – use of telehealth • Approved and trusted resources - use of NHS App/PKB (consider range of formats – sensory, age) to signpost to advice and services with a central repository of information and services for MSK – linking with social prescribers to signpost to information • Working with charities e.g. Versus Arthritis to enhance access to information and signpost to peer support groups • Home based prehabilitation offer – covering all interventions – with links to MSK team to review goals • Enabling access to the MSK pathway via self-referral and patient initiated follow up • Enabling SDM through shared consent to access health information and signposting to Decision Support Tools e.g. Versus Arthritis to support principles and align to patient goals and wishes • Interfaces and virtual connections to support coordination of care between the integrated MSK MDT and the patient to support decision-making • Social care input to MDT to enable independence and preventative interventions

7. Transformation Proposal

Prevention through **education and awareness:**
- Raising awareness of risk factors
- Targeting areas of inequality
- Promoting physical activity for primary and secondary prevention
- Signposting to lifestyle interventions and structured self-management

High Priority

Far more needs to be done to raise awareness amongst the population, from addressing risk factors through to helping people manage their health and wellbeing. Led by Public Health (PH) and working in partnership with charities and Active Notts, education of the population increases understanding of the risk that may impact their future wellbeing and how some lifestyle choices, such as obesity and physical inactivity increase risk of developing MSK conditions. A Population Health Management (PHM) approach targeting areas of inequality and supporting the ambition to reduce health inequalities across the ICS.

Access should be readily available to trusted and approved sources of information (e.g. NHS App/PKB) to support ambitions to raise awareness. A website and/or information hub for MSK acting as a central repository of information to signpost people to information and peer support, with support from social prescribers and link workers. Education of the workforce equips them with information to have brief conversations with people, when appropriate and when they recognise that someone may be at increased risk, increasing their confidence in providing brief interventions and signposting to support and advice.

Broadening access to structured self-management education programme e.g. ESCAPE-pain, both face-to-face and digitally, supports the promotion of physical activity to deliver the benefits of secondary prevention. The use of technology and artificial intelligence (AI) providing further opportunities to navigate people to the right support.

Impact & Benefit
- Delivering personalised, individual and meaningful interventions to support prevention
- Improved health outcomes, healthy life expectancy and quality of life years
- Earlier intervention reducing treatment burden and number of surgical interventions

Alignment – To support prevention through widespread education and awareness alignment and delivery should be at an ICS level to support a consistent approach.

Robust offer of **Prehab and Rehab** across the ICS:
- Risk stratified to support a flexible approach
- Exercise support before, during and after
- Signposting to lifestyle interventions and psychological support
- Reablement to promote independence and provide ongoing support

Med Priority

A robust and sustainable prehabilitation programme is required across the ICS. This can help improve outcomes following surgery by optimising health and fitness when offered at diagnosis. Prehabilitation programmes includes access to interventions such as physical activity, psychological support and behavioural change prior to treatment. SCOPES also undertakes an assessment of frailty, with an opportunity to combine in a future prehabilitation offer. Variation in health status at diagnosis supports a risk stratification approach to signpost people to the right expertise e.g. SEM consultant for complex presentations and target interventions based on risk with flexible methods of delivery, such as virtual education and signposting to lifestyle interventions, through to Face to Face intensive programmes for people with higher risk. Existing programmes, such as cardiac and pulmonary rehabilitation, and services e.g. fitness instructors in gyms can support the development of a prehabilitation model across the ICS with risk stratification defining access across settings. Collaboration and seamless transitions between settings supports the ambition to offer prehabilitation across the ICS. Extending access to prehabilitation to people on waiting lists provides ongoing support and reduces deterioration in health status in advance of surgery.

Access to rehabilitation after surgery and access to reablement supports the return to independence and ensures access to the right care. Timely referral and close collaboration between health and care enabling timely discharge and implementation of care packages for those with additional needs

Impact & Benefit
- Consistent and equitable access to interventions to optimise health across the system
- Improvement in PROMS, learning and celebrating success
- Better surgical outcomes including reduced length of stay and complications
- Supported to make sustainable lifestyle change can help impact on other comorbidities too

Alignment – To support a robust offer of prehabilitation and rehabilitation alignment should be at an ICS level to support a consistent approach, with more local delivery at an ICP level

NOTE: In further developing and implementing the proposals set out above as part of our focus, each partner organisation within the ICS will continue to ensure that they comply with their statutory duties and system/organisational governance processes, particularly (but not limited to) those relating to patient and public involvement; equality and inequality analysis

7. Transformation Proposal

Streamlining pathways with an **equitable and consistent approach**:

- Entry to MSK pathway - including First Contact Practitioner role, single point of access and self-referral
- Focus on patient driven outcome goals
- Navigation and access to the right care, first time
- Supporting self-management e.g. patient initiated follow-up

High Priority

As the MSK to elective orthopaedics transformation proposals evolve supporting prevention and prehabilitation, more needs to be done to streamline pathways. FCP roles are emerging across PCNs to enhance expertise at entry to the MSK pathway and support GP capacity. Access is inequitable across the ICS with multiple practice operating models emerging, with the development of a consistent approach enabling equitable access and navigation. Health Education England (HEE) outlines the development of skills to enable complex decision-making and high levels of autonomy. The development of a consistent approach to education and opportunities to gain insights from multiple HCPs working across settings, alongside robust governance and clinical supervision arrangements, supports connecting the FCP to the integrated MSK MDT, but with due attention to the retention of specialist physiotherapy skills in other settings.

Defining entry to the MSK in primary care and connection with the MSK triage process in a consistent way supports the ambition of delivering a single point of access and self-referral to the MSK pathway. Embedding shared decision-making conversations and agreeing patient reported outcome measures (PROMS) supports patient activation and navigation and opportunities to incorporate the principles of PIFU in future pathway delivery.

Navigation is facilitated by consistent and equitable access to expertise across the MSK to elective orthopaedics pathway. Referral criteria are not uniform across providers, with opportunities to develop uniform criteria across the ICS to support a consistent approach. Services, such as physiotherapy, do not have a consistent service offer or ability to refer between settings. Developing a consistent and equitable approach enables navigation to the right person, right setting, first time.

Impact &Benefit

•Capacity in primary care as represents 30% of patients attending with an MSK issue
•Enhanced experience as accessing right care, first time – with seamless transitions between services and settings
•Improved patient activation through shared decision-making to achieve personal goals
•Streamlined diagnostic pathways with a reduction in inappropriate investigations
Alignment – To support a consistent and equitable approach alignment and delivery should be at an ICS level

Optimal capacity to enable **year round operating** across Nottingham and Nottinghamshire:

- Separation of 'hot' and 'cold' activity
- Ring fencing to mitigate impact of winter pressures
- Effective use of capacity across NHS and independent sector

High Priority

Delivering year round operating capacity for Nottingham and Nottinghamshire will support future elective orthopaedic demand, but also address the significant backlog as a consequence of the COVID-19 pandemic. Fundamental to delivering this is the implementation of GIRFT recommendations.

A 'cold' operating facility is recommended either within an existing hospital environment or separate on the same site. Consideration to existing estate, interdependencies, day case and independent sector capacity informing future options. Protecting elective orthopaedic operating capacity during times of service pressure also requires ring-fencing of beds as part of the development of plans for optimal configuration of estate. Ring-fencing of the workforce is required to meet this ambition, with consideration to 7 day service delivery.

Visibility of system capacity across settings and sectors provides an opportunity to flex capacity to meet demand at times of service pressure.

Orthopaedic capacity can be further enhanced by reducing length of stay for people undergoing elective procedures. Connecting with the ICS prehabilitation offer for people with longer waits and enhanced collaboration between health and care for those with complex needs as key enablers.

Impact & Benefit

- Reduction in waiting lists and cancelled procedures by maintaining surgery throughout the year
- Reduced complications, including infections, and LOS
- Standardised approaches to hip and knee replacements – support predictable LoS to aid planning

Alignment – To support year round operating across the ICS alignment and delivery should be at an ICS level

NOTE: In further developing and implementing the proposals set out above as part of our focus, each partner organisation within the ICS will continue to ensure that they comply with their statutory duties and system/organisational governance processes, particularly (but not limited to) those relating to patient and public involvement; equality and inequality analysis

7. Transformation Proposal

Integrated MSK MDT to support seamless and coordinated care:

- Defined capabilities across health and care
- Enhanced public awareness of skills and knowledge
- Education, training and shared decision-making
- Interfaces and virtual connections

High Priority

Developing an integrated pathway and MDTs for MSK to elective orthopaedics supports the ambition of person-centred coordinated care. Optimal pathway and MDT configuration supports the implementation of EBP, which in turn supports a consistent and equitable approach across the ICS, reducing unwarranted variation in decision-making, outcomes and productivity. Locally, there is variation in pathway delivery with opportunities to develop the MSK MDT function to develop an integrated partnership approach. Central to the approach is consideration to the capabilities and/or roles to be included within the MDT. New roles are emerging, such as the FCP and GPwER with differences in expertise and support included within the MDT. Defining these with a consistent approach aligned with the HEE roadmap for FCP and similar roadmap for GPwER and AHP accreditation supports the ambition to navigate patients to the right person, right setting, first time. With the development of the MDT function enhanced understanding between professionals and the public of the capabilities, skills and knowledge of healthcare professionals will further support navigation underpinned by shared decision-making conversations, agreed goals and outcome measures. An integrated MSK pathway also supports shared learning, with opportunities to develop a collaborative education and professional development strategy for the ICS, with a central repository of information and resources for MSK supporting this ambition.

Improving access to patient information for care providers can improve outcomes, but different digital systems across the ICS makes this difficult. Commissioners and providers should consider the current IT infrastructure and how it can be improved to support visibility of information and allow timely interchange of information. This may mean consolidation of existing IT systems in use, or to consider the interfaces between systems, but the key is to allow instant sharing of vital information to allow timely decisions to be made reducing avoidable delays for patients between services and settings.

Connected Notts has been instrumental across the ICS in improving health information developed and shared to enhance quality across health and care services. This has included the development of electronic processes, such as the optimal use of the GP referral guidance service (F12) and GP Repository for Clinical Care linked to EHealthScope to inform of particular needs in any area of the ICS. Public Facing Digital Services allows citizens access to manage their Health and Care online through the NHS App and Patients Know Best (PKB) platform. Connecting the public with digital structured self-management education programmes and AI technology e.g. Physio Now further enhancing access to enable self-management. Enhancing patient facing and virtual appointments at scale provides further opportunities to provide efficient and timely support through the widespread implementation of PIFU, with electronic processes to capture shared decision-making conversations. These and other electronic processes, such as visibility of diagnostic images and links to EMRAD, supports decision-making and earlier intervention. Consistent use of outcomes, including PROMS, supports understanding of service delivery and service developments to evolve MSK to elective orthopaedic services.

Impact & Benefit

- Reduced secondary care waiting lists and outpatient attendances
- Increased prevention and more self-care.
- Reduction in inappropriate referrals
- Cost savings to the system

Alignment – To ensure an equitable approach across all areas, the consistency of this proposal should align and be delivered at an ICS level

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MSK to Elective Orthopaedics Transformation Proposal

Integrated Care System
Nottingham & Nottinghamshire

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	Priority (High/ Med/ Low)	Alignment (ICS/ ICP/ PCN)		Workforce	Technology	Estate/ Configuration	Finance/ Commissioning	Culture	Benefits (*Less than £20,000 per QALY is cost effective)
		Consistency	Delivery						
Prevention through **education and awareness:** • Raising awareness of risk factors • Targeting areas of inequality • Promoting physical activity for primary and secondary prevention • Signposting to lifestyle interventions and structured self-management	HIGH	ICS	ICS	•Social prescriber , link workers and FCP to signpost people to information and groups •Public Health resource for public campaigns and education strategies •Workforce in the right place and with a consistent offer e.g. obesity •Education of workforce – PHM approach, MECC, coaching skills and signposting •Broader workforce across 3rd sector e.g. Active Notts, PH, social care and private sectors e.g. exercise instructors	•App and PKB to support access to trusted & approved resources •Wearable technology e.g. step counters •Digital campaigns/hub/website for MSK •Broadening access to Apps e.g. gyms to signpost people to e.g. ESCPAE-Pain •AI to navigate to the right care •Interfaces to enable capture/reporting of outcomes •Social media - raising awareness e.g. TikTok •Active Notts – collaborating to promote prevention	•Community hub space to support prevention activities •Use of council and local gyms – equity of access and consideration to deprived areas	•Developing key measures for success aligned with ICS healthy life expectancy ambition •FCP role - consideration to how resource can support	•MECC seen as everyone's responsibility •Cultural change to use technology to deliver benefits •Culture change to build relationships and work in partnership with patients •Education to enable health promotion e.g. motivational interviewing •Building social networks to provide support and empower people •Promote PHM approach to target high risk factors and understand and recognise social inequalities with respect to healthy living	**•Delivering personalised, individual and meaningful interventions to support prevention** **•Improved health outcomes, healthy life expectancy and quality of life years** **•Earlier intervention to reduce extent of intervention required** **•Reduced number of surgical interventions**
Robust offer of **Prehab and Rehab** across the ICS: • Risk stratified to support a flexible approach • Exercise support before, during and after • Signposting to lifestyle interventions and psychological support • Reablement to promote independence and provide ongoing support	MED	ICS	ICP	•Education to enable behaviour change and signposting to lifestyle interventions •Capacity in lifestyle intervention services •Upskilling workforce e.g. fitness instructors •Workforce to deliver risk stratified approach e.g. SEM consultant for complex cases, prehabilitation therapists •Psychological support and capacity e.g. IAPT •Physio undertaking frailty assessments – with geriatrician support •Capacity to extend to people on waiting lists •Engage all community assets to develop skills to deliver approach e.g. Social services undertake preventative meetings to share good practice	•Technology to deliver tailored programmes •Recorded programmes for those unable to access technology •Website/digital hub to raise awareness of all groups available locally •Interfaces to enable sharing of information and greater integration •Technology to support FCP role and integration in MSK pathway •PROMS recorded across all settings with interfaces to monitor and share •Prehab and rehab contacts and interventions recorded across all settings and visible to all	•Access to space across community and acute settings to deliver risk stratified approach •Use of council and local gyms – equity of access and consideration to deprived areas	•Commissioning to deliver surgical prehab - affect on current tariffs •Commissioning to ensure all interventions are accessible equitably across the system e.g. lifestyle interventions •Funding for training and supervision – including widespread behaviour change/motivational interviewing training •Contractual requirements around use of alternative estate e.g. gyms	•Understanding of the barriers to making lifestyle change for people with complex lives •Enabling change by involving family to provide support •Cross-system working to deliver prehabilitation and rehabilitation across the system – breaking down system barriers •Working in partnership to develop skills, competence and confidence •Clear understanding and cultural change of the differences between Prehab and Rehab and role in optimising health pre-surgery	**•Consistent and equitable access to interventions to optimise health across the system** **•Improvement in PROMS, learning and celebrating success** **•Better surgical outcomes** **•LOS reduction – fewer complications, better informed to improve outcomes and** **•Supported to make sustainable lifestyle change can help impact on other comorbidities too**

MSK to Elective Orthopaedics Transformation Proposal

Integrated Care System
Nottingham & Nottinghamshire

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	Priority (High/ Med/ Low)	Alignment (ICS/ ICP/ PCN)		Workforce	Technology	Estate/ Configuration	Finance/ Commissioning	Culture	Benefits (*Less than £20,000 per QALY is cost effective)
		Consistency	Delivery						
Streamlining pathways with an **equitable and consistent approach:** • Entry to MSK pathway - including First Contact Practitioner role, single point of access and self-referral • Focus on patient driven outcome goals • Navigation and access to the right care, first time • Supporting self-management e.g. patient initiated follow-up	HIGH	ICS	ICS	•Consistent adoption and robust inductions for FCP and competency sign off •FCP in integrated MDT to develop networks •Workforce strategy for physiotherapists – recruitment/ education due to impact of FCPs on other services •GP integrated with FCP – role of GPwER •SEM consultant integrated in pathway – capacity •Alignment of PCN and MSK MDT •ACP roles defined consistently in the system	•Technology for self-referral, PIFU and self-management •Sharing access to systems to support visibility of information and access to self-management •Technology in primary care to navigate to FCP/social prescribers •Interfaces for visibility of all information across settings – including EMRAD	•Space for FCP and social prescriber roles •Estate to support equitable pathway delivery e.g. physiotherapy gym, accessible to patients	•Outcomes based commissioning to access capabilities within the team e.g. SEM/EO etc •Commissioning of physiotherapy services to deliver equitable access and service delivery and enable navigation •Funding to consider education, training, equipment and estate to deliver the pathway	•Consistent implementation and understanding of FCP role integrated in MSK pathway •Defining pathways to support consistent approach, single point of access and triaging principles aligned with FCP role •Agreement on the application of evidence- based practice regarding the best diagnostic modality which is clearly defined and consistently used	**•Capacity in primary care as represents 30% of patients attending with an MSK issue** **•Enhanced experience as accessing right care first time – with seamless transitions between services and settings** **•Improved patient activation through shared decision making to achieve personal goals** **•Streamlined diagnostic pathways with reduction in inappropriate investigations**
Optimal capacity to enable **year round operating** across Nottingham and Nottinghamshire: • Separation of 'hot' and 'cold' activity • Ring fencing to mitigate impact of winter pressures • Effective use of capacity across NHS and independent sector	HIGH	ICS	ICS	•Align workforce considerations across NHS and independent sector e.g. referred back to NHS for rehabilitation – support staff capacity to provide this e.g. physiotherapy •Ring fence staff aligned with ring fencing bed capacity to year round operating •Capacity to deliver 7 day service •Equitable administration capacity •Social care referral and involvement prior to surgery	•Visibility of system capacity to flex across settings and sectors during periods of pressure •Interfaces across systems to support visibility of information – consideration across independent and NHS with data sharing agreements •Technology to support referral – timing and quality- to social care	•Cold operating facility within existing site – national recommendation e.g. NHSE - utilise Newark site •Optimise use of day case and the development of pathways to improve access and RTTS – defined links to prehab offer •Ring fenced beds to protect elective orthopaedic operating capacity - consider not on acute site	•Commissioning to support effective use of NHS and independent sector capacity •Consideration to direct referral or coordination of referrals to independent sector •Funding for a 7-day service •Finance to balance ring-fenced bed capacity with workforce capacity	•Cultural change to ensure common understanding of ring-fencing principles – beds and staff need to be ring fenced •Elective orthopaedics is life-changing but not life-saving requiring a consideration to the wider cost burden to local economy •Principles of ring-fencing to maintain capacity but also to reduce infections risks •Proactive support from social care in advance of surgery to enable timely discharge without delays	**•Reduction in waiting lists** **•Reduced cancellations** **•Capacity maintained throughout the year** **•Reduced complications, including infections, and LOS** **•Standardised approaches to hip and knee replacements – support predictable LoS to aid planning**
Integrated MSK MDT to support seamless and coordinated care: • Defined capabilities across health and care • Enhanced public awareness of skills and knowledge • Education, training and shared decision-making • Interfaces and virtual connections	HIGH	ICS	ICP	•Education of workforce to define and develop capabilities to enable MDT approach •Maintain skills of physio workforce access all areas of assessment to treatment •Education across settings to develop capabilities all complexities and all parts pathway including treatment advocating and possible option for rotations •Exploit workforce capabilities in community care with a consistent approach across the ICS •Social care working with community health partners at ICS level to look at linking to MDTs – particularly from reablement perspective	•Interfaces and virtual connections to support MDT function and connection with the patient – learning from City Care model •Access to diagnostic results across settings - Xray, US, nerve conduction, MRI •Technology to support patient familiarity with services and MDT "All under the same roof/ working together"	•Location – consideration to access to expertise for MSK across the system and in all ICPs with consideration to expertise already in PCNs e.g. GP/FCP/ Social prescribers	•Commissioning to enable access to expertise and avoid linear pathways •Funding to backfill for training •Funding for estate and virtual connections for MDT •Aligned incentives across healthcare professionals to support integrated MSK MDT	•Partnership working to optimise and share expertise •Breakdown linear access to expertise e.g. consultant at front of pathway •Shadowing and working together to avoid "us and them" •Joint education and shared learning to listen and learn from each other and gain insights to capabilities across professions – enhancing awareness with the public to support pathway navigation	**•Cost savings to the system** **•Reduction in waiting lists for SC** **•Reduced secondary care outpatient attendances** **•Increased prevention and more self-care.** **•Reduction in inappropriate referrals**

8. Enabling Requirements

Workforce	Enhancing the future health and social care for MSK to elective orthopaedic services, requires the following main considerations for workforce: • Widespread training of healthcare professionals (HCPs) to empower them to provide appropriate advice or signposting to address risk factors, promote healthy living and enable self-care through behaviour change • Social prescribers and link workers to support signposting • Capacity and education of broader workforce e.g. exercise instructors to support prehabilitation offer • Capacity in lifestyle services e.g. weight management • Workforce to support ring-fencing ambitions and 7 day delivery • Roll-out of FCP roles considering broader physiotherapy workforce implications with education (including masters level study) and clinical supervision • Cross pathway working (primary and secondary and community care) for healthcare professionals with specific development of integrated MSK MDT – with consistent capabilities including ACP, GPwER, Sports and Exercise Medicine and Orthopaedic Clinicians
Technology	The main areas in which technology can effect transformation for MSK to elective orthopaedics include: • Support existing App developments/ promotions for signposting self-care resources or local services – based on NHS App/ PKB • Access to digital structured self-management programme e.g. ESCAPE-pain • Enhanced use of wearable devices and AI to support connections between the patient and HCP • Use of F12 and ERS to support MSK triage and navigation • Enhanced technology to capture shared decision-making conversations and PROMS • Digital reporting of diagnostic results and links with EMRAD to enable visibility of information to support decision-making • Enhanced use of technology to aid virtual delivery and connections between the patient and MDT • Digital integration - If it is accepted that a single IT system may not be deliverable in the long term then focus should be on connecting existing systems successfully – more to do with access and permissions through improved interfacing
Estate	• Prevention and prehabilitation activities for MSK requires access to community hub space and council and local gyms, with consideration to equity of access for deprived areas. To enable a risk stratified approach consideration to estate requirements in acute settings for assessment and intervention • Configuration to deliver 'cold 'operating facility within existing estate and enable ring-fencing of beds - consideration to day case and independent sector capacity • FCP roll out across PCNs – with access to space to support pathway delivery • To support equitable pathway delivery e.g. physiotherapy gym • Enabling access to integrated MSK MDT expertise within ICPs and PCNs, with consideration to roles already in place
Culture	• Cultural change to support prevention and sustained lifestyle change, with the principles of everybody's responsibility • Commitment to the principles and benefits of prehabilitation • Common understanding that elective orthopaedics is life-changing but not life-saving requiring consideration to the wider cost burden to the local economy and with optimal configuration to meet demand and deliver high quality outcomes • Defining pathways to support consistent approach including; single point of access, triaging principles and consistent and defined diagnostic modalities • Shift in culture with the development of emerging roles e.g. FCP, with trust in expertise and decision-making to optimise opportunities • Cross-organisational collaboration and commitment to MDT working to support optimal access to expertise, seamless transitions of care across settings, with the principles of person-centred care and shared decision-making embedded • Joint education and shared learning to listen and learn from each other and gain insights to capabilities across professions

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Bridge to the Future

MSK to Elective Orthopaedics Services Future Vision:

From…		Phase 1 1st year	Phase 2 2-3 years	Phase 3 5 year +	To…
•Limited education across the ICS population of risks •Inconsistent approach to making every contact count •Inequitable access to services to address lifestyle risk factors and support structured self-management •Inconsistent provision and access to prehab and rehab across the ICS	Prevention & Optimisation	•Develop a website as a repository of information for MSK •PH campaign to raise awareness •Scope optimal approach to prevention, prehab and rehab – consider health inequalities, risk stratification, workforce development and programme management oversight •Extend structured self-management e.g. ESCAPE-Pain access with self-referral	•Implement website – identify gaps and resolve •Implement prevention activities with development prevention hubs with MDT 'huddles' inclusive of all org/partners •Prehab and rehab model implemented •Workforce plan rolled out integrating existing workforce	•Embed use of website – robust plans for ongoing maintenance, audit and quality assurance •Ongoing review of prevention interventions and outcomes – further investment in facilities/services to ensure equity of provision •Embed prehab and rehab offers with ongoing review to achieve consistency	•Structured education programmes across the ICS population of risks •Consistent approach to making every contact count •Equitable access to services to address lifestyle risk factors and support structured self-management •Consistent provision and access to prehab across the ICS
•Inconsistent entry and navigation with linear pathways across settings •Inconsistent adoption of shared decision-making and outcome measures to enable person-centred intervention •Inequitable access and adoption of FCP role	Referral & Early Intervention	•Develop a pathway aligned with defined outcomes– entry points (incl. self referral) and roles to achieve single point of access •Utilise F12 to navigate •Review commissioning barriers •SDM accessible to all settings with confidence in conversations •Develop FCP roadmap including development, governance and workforce impacts	•Ongoing review of pathway entry , navigation & outcomes •System commitment to outcomes to determine interventions and value – dashboard for MSK to inform •Ongoing roll-out of FCP roadmap and workforce development • Integration of FCP roles in integrated MSK MDT	•Navigation embedded across roles and settings to deliver a single point of access and lateral pathways •Adapting SDM approaches with emerging EBP and informed by PROMS •FCP roles consistent and embedded in integrated MSK MDT with ongoing CPD	•Consistent entry and navigation to the right expertise in the right setting with opportunities to support self-referral •Consistent adoption of shared decision-making and outcome measures to enable person-centred intervention •Equitable access and adoption of FCP role
• No robust plan for the separation of 'hot' and 'cold' elective orthopaedic beds across the system •No ring-fencing provision to maintain year round operating during periods when capacity is limited in the system	Sustainable Surgery	•Understand national backlog across NUH, SFHT and independent sector •Review of commissioning principles – sector, IP vs DC, high volume vs high complexity to inform year round operating capacity •Workforce mapping to achieve ambitions •Offer prehab for those on WL	•Consider future demand •Options appraisal for best configuration to separate hot & cold activity – include interdependencies •System capacity visible to flex across settings and sectors •Implement workforce plans •Enhance rehab and complex packages of care – earlier referral and positive risk taking	•Plans implemented to ensure separation of hot and cold activity across the ICS •Increased capacity through all systems responsive to future requirements and an ageing population – process to plan for peaks in capacity longer and earlier to enable ring-fencing to take place	•Robust plan for the separation of 'hot' and 'cold' elective orthopaedic beds across the system •Ring-fencing provision for both beds and workforce implemented to maintain year round operating during periods when capacity is limited in the system
•Inconsistent pathways, including physiotherapy, across the ICS to navigate to the right care first time •Inconsistent MSK MDT model with gaps in expertise and opportunities to enhance collaboration •Lack of interfaces between systems to support decision-making	Whole System Approach	• Pathways and outcomes defined with consistent onward referral to underpin the role of MSK MDT •Review contractual arrangements, including physiotherapy, to pathway •Define MDT membership, capabilities and roles and connections with other MDTs •Scope workforce education and shared learning opportunities •Scope systems and connections required, with learning from good practice e.g. radiology	•Implement pathways with outcomes used consistently to understand impact and value •Commissioning arrangements in place to support ambitions •Workforce development underway to develop roles and capabilities •Development of facilities e.g. community MSK hubs •Interfaces and virtual connections to enable MSK MDT delivery	•Pathways embedded and connections with all organisations and providers in place supporting integrated MSK delivery •Ongoing process to identify future innovations and training requirements •Visibility of information across all settings to support decision-making and connections with the patient	•Consistent pathways, including physiotherapy, across the ICS navigating people to the right care first time •Consistent and integrated MSK MDT model supporting a partnership approach to deliver seamless and coordinated care •Robust interfaces between systems and optimised use of shared care systems to support decision-making

10. Conclusions and Next Steps

Conclusions	The review of MSK to elective orthopaedic services as part of the development of a Clinical and Community Services Strategy for Nottingham and Nottinghamshire ICS has been undertaken using a co-design model where patients, carers, key stakeholders and voluntary sector groups, have collaboratively worked together to shape a vision for the future care system. The work has progressed well working remotely and holding virtual meetings. The four key themes for improvement identified are: Prevention & Optimisation (with a targeted education programme, helping to raise awareness of risk factors, targeting areas of inequality, promoting physical activity for primary and secondary prevention, signposting people to structured self-management programmes and a robust offer of prehabilitation, rehabilitation and reablement); Referral & Early Intervention (streamlining pathways with an equitable and consistent approach, entry to the MSK with consideration to the FCP role, single point of access and self-referral, a focus on patient driven outcomes goals, navigation and access to the right care first time and supporting self-management including patient initiated follow-up); Sustainable Surgery (developing optimal capacity to enable year round operating, separation of 'hot' and 'cold' activity, ring-fencing to mitigate winter pressures, effective use of capacity across NHs and independent sector); Whole System Approach (developing an integrated MSK MDT to support seamless and coordinated care, defined capabilities across health and care, enhanced public awareness of skills and knowledge, education, training and shared decision-making, technology to support visibility and access to information). The review describes a future care system in optimal care settings and with care provided at different levels of urgency and envisages 4 high priority programmes to transform care: **High** – Prevention through education and awareness **High** – Development of optimal capacity to enable year round operating across Nottingham and Nottinghamshire **High** – Streamlining pathways with an equitable and consistent approach **High** - Integrated MSK MDT to support seamless and coordinated care To achieve these there are a range of enabling requirements for the ICS across workforce, technology, estate, culture and financial systems. Collectively these initiatives can help transform and provide long term health improvement and sustainability in the area of MSK to elective orthopaedic services in the Nottingham and Nottinghamshire ICS.
Next Steps	This strategy sets the future direction of development for MSK to elective orthopaedic care in the ICS and it is proposed it will shape future work of the ICS in a number of ways: • The identified priorities and programmes should be used to inform commissioning ICS, ICP and PCN activity • The enabling activities require development and inclusion in the relevant ICS workstreams to inform their work programmes • The impact on estate and configuration changes require inclusion in a programme of pre-consultation business case development alongside the service changes recommended from other reviews • The aggregate impact of the collective suite of service reviews should be used to shape focus of future service provision in acute and community settings in the ICS

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11. List of Abbreviations

A&G	Advice and Guidance	IT	Information Technology
ACP	Advanced Clinical Practitioner	LA	Local Authorities
AHP	Allied Health Professional	LoS	Length of Stay
AI	Artificial Intelligence	LTC	Long Term Conditions
App	Application	LTP	Long Term Plan
BAME	Black, Asian and Minority Ethnic	MDT	Multi-Disciplinary Team
BMI	Body Mass Index	MECC	Make Every Contact Count
BOA	British Orthopaedic Association	MH	Mental Healthcare
CCSS	Clinical and Community Services Strategy	Mid Notts.	Mansfield & Ashfield, Newark & Sherwood
CCG	Clinical Commissioning Group	MRI	Magnetic Resonance Imaging
CNS	Clinical Nurse Specialist	MSK	Musculoskeletal
CPD	Continuous Professional Development	NHS	National Health Service
CPET	Cardiopulmonary exercise testing	NHSE/I	National Health Service England and Improvement
CSP	Chartered Society of Physiotherapists	NICE	National Institute for Health and Care Excellence
CT	Computed Tomography	NUH	Nottingham University Hospitals
DC	Day Case	OA	Osteoarthritis
DoS	Directory of Service	OOH	Out of Hours
EBP	Evidence Based Practice	OP	Outpatient
ED	Emergency Department	PC	Primary Care
EMAS	East Midlands Ambulance Service	PCN	Primary Care Network
EMRAD	East Midlands Imaging Network	PCRMM	Primary Care Rheumatology and MSK Medicine
EO	Elective Orthopaedics	PHE	Public Health England
ERS	E-Referral Service	PHM	Population Health Management
F12	GP referral guidance system	PID	Project Initiation Document
F2F	Face to Face	PIFU	Patient initiated follow-up
FCP	First Contact Practitioner	PKB	Patient Knows Best
FSEM	Faculty of Sports and Exercise Medicine	PROMS	Patient Reported Outcome Measures
FU	Follow up	QoL	Quality of Life
GBD	Global Burden Disease	QIPP	Quality, Innovation, Productivity and Prevention
GIRFT	Getting It Right First Time	QALY	Quality Adjusted Life Year
GP	General Practitioner	ROI	Return on Investment
GPwER	GP with extended role	SC	Social Care
H&SC	Health and Social Care	SCOPES	Systematic Care of Older People in Elective Surgery
HCP	Healthcare Professional	SDM	Shared Decision-making
HEE	Health Education England	SEM	Sports and Exercise Medicine
IAPT	Improving Access to Psychological Therapies	SFH	Sherwood Forest Hospitals
ICP	Integrated Care Partnership	WL	Waiting List
ICS	Integrated Care System	UK	United Kingdom
IP	Inpatient		

12. Data Sources

Data Sources	British Orthopaedic Association Care Quality Commission Local Data from NUH, Connect, City Care, MSK Together Alliance, Social Care, CCGs, GPRCC, eHealthscope Getting It Right First Time Moving Medicine National Institute for Health and Care Excellence NHS Digital NHS England NHS Long Term Plan Public Health England Versus Arthritis