NCSOS Report 1 - Orthopaedic Recovery
Urgent - For Immediate Action

1. Executive Summary

The ability to maintain and provide Orthopaedic services in Wales is precariously balanced. There are numerous reports of patient harm resulting from a failing service. Staff morale is low, faith in the ability of health boards and Welsh Government to deliver and invest in services is failing, the reputation of NHS Wales as an employer is fragile. Unless coherent plans are enacted to restart surgery consistently and at pace, services are likely to fail and take a generation to rebuild. The inevitable consequence of further harm to this very large patient group is catastrophic, especially when considering the impact on their wider employment, social and support networks. This is no longer an isolated secondary care surgical issue, it is an impending public health crisis. There is a necessity to work differently and an opportunity to design and deliver Orthopaedic services that the population of Wales deserve.

The National Clinical Strategy for Orthopaedic Surgery (NCSOS) project was established in September 2021 to develop an evidence based long-term blueprint for elective Orthopaedic Surgery to transition to a sustainable service for the population of Wales. However, the project CRG workshops and GiRFT deep dives have highlighted significant operational and patient safety issues, and instances of patient harm. It is also clear that morale across Orthopaedic services is at a critically low point nationally. Clinical and Operational staff share concerns that the seriousness of the impact of delayed intervention is not being appreciated or acted upon. In the short term, this is likely to result in increased complaints, litigation and early retirement/ resignation of staff. Longer term the ability to engage clinicians in transitioning to a sustainable model to services could be irrevocably damaged.

To address these concerns, the NCSOS team have decided to publish this interim report to support immediate operational orthopaedic recovery plans, in advance of the NCSOS strategic reports.

Elective orthopaedic services in Wales have been failing to deliver timely and equitable services to the population of Wales for decades but the Pandemic has exposed the challenges being faced on a day-to-day basis by those tasked with delivering services. Both managers and clinical teams have been required to accept de-prioritised status for patients against other surgical specialities for outpatient and theatre space, and against medical/ unscheduled care admissions for the Pandemic and then seasonal pressures. This perfect storm has resulted in minimal elective surgery being undertaken since March 2020 due to system capacity issues and around 35,000 people waiting for a treatment date, 11,000 of

which have waited over two years. In some health boards this wait is reaching four years.

The failure to restart orthopaedic services has created a crisis with significant impact on the population requiring additional support, decreased quality of life and facing reduced quality outcomes from surgery. An increasing number of patients are requiring more complex procedures than would have been needed initially and are facing greater risk as a result. While not facing a cancer or immediately life threatening situation, many have described the wait as a slow, tortuous sentence without any end point in sight and a fate "worse than death"[1]. Patient stories such as those below are commonplace and described first hand to clinicians and operational staff across Wales.

"I am a local man living in Gorseinon with my wife who is 82 and living with a heart condition. I have spent the last two years in agonising pain in my knee. I am living downstairs, I have no quality of life, and cannot walk two yards. I feel like I am going to have a breakdown. I am unable to go for walks or visit family"

"I am bed bound and being cared for by my husband due to total loss of mobility in my hip and agonising pain whenever I try to move. For a lady in her sixties this is a complete loss of dignity"

"I am a woman in my 60's, which I believe is considered young these days - have had to re-mortgage my house to pay privately the pain was so great"

"I am a sport student in my third year at University and am unable to participate in many sports such as rugby & football. I have a continual pain in my left shoulder. I am unable to lift weights or go to the gym with my friends and colleagues due to my injury, which has affected my studies, health & wellbeing"

"I am struggling to remain in work despite reluctantly reducing my working hours. I live alone and rely on my wage to pay the mortgage. The threat of losing my house is constantly on my mind if I can't remain in work because I am not having my operation in a timely manner"

This document outlines the immediate issues being faced by orthopaedics and is designed to support local and National resolution.

The recommendations are based on advice from clinicians across Wales following their engagement in sub-specialty clinical reference groups and views expressed by GiRFT (Getting it Right First Time) in their recent deep dives in to Health Board services.

It is imperative that all those involved (Welsh Government, Clinical leadership and Health Board executive and managerial teams) take ownership of the recommendations made within this document.

This will require the system to reset and re-focus from the pandemic and to recognise the significant impact delays in surgery are having on individuals and society in general. 35,000 are waiting for surgery, with a further 63,000 waiting to be reviewed or assessed for the need for treatment. Almost 1.7% of the population of Wales are currently waiting for orthopaedic surgery, with another 2% waiting to be assessed. 28% of those waiting for surgery in Wales are waiting for an orthopaedic procedure.

Immediate action is required from all parties to:

i. **Provide surgical capacity to operate on patients classified as P2 and P3 under the Royal College of Surgeons urgency classifications.**

ii. **To support service delivery with ring-fenced beds that limit infection control and cancellation of cases.**

iii. **Review and re-evaluate site management prioritisation of resources to provide consistent access to beds, staffing and resources to prevent the waiting list growing while longer term plans are developed.**

iv. **Recognition that ambulatory trauma demands have been treated within the sessions of elective service. With these services suspended, the trauma load of services need to be reconsidered and designed accordingly.**

Subsequent sections will outline and summarise clinical risk and operational risks that have been highlighted within individual health boards, within sub-specialities, and issues which are common themes to all.

2. Background

The delivery of orthopaedics has been challenging in Wales for decades. The National GiRFT (Getting it Right First Time) review of services was commissioned in 2014 by Welsh Government ahead of the formation of the National Planned Care Programme and the Welsh Orthopaedics Board. However the recommendations made by GiRFT and supported by clinicians to provide dedicated elective Orthopaedic ring fenced beds through the development of cold elective sites within each Health Board, were not implemented. As a result, services continued to be impacted by regular and frequent unscheduled care pressures.

The Pandemic has exposed this failing system and resultant capacity shortfalls within orthopaedics to the fullest. In September 2021, Welsh Government (WG) commissioned the National Clinical Strategy project for Elective Orthopaedics Surgery (NCSOS) with the primary objective of developing a surgically focused redesign and blueprint for the future state of elective Orthopaedic surgery delivery in Wales, unconstrained by Health Board (HB) boundaries. Alongside this, GiRFT were commissioned to undertake a parallel review in co-ordination with the NCSOS project to provide recommendations for recovery and redesign of services in the short term. It should be noted that Paediatric Orthopaedics and Spinal Surgery services are being considered separately as part of the WHSSC programme of commissioning.

While the project is focused on the development of long-term strategy, current risks and issues for patient care cannot be ignored.

Similarly, whilst focused on redesigning elective pathways and capacity, the NCSOS cannot ignore the main interdependency of Trauma. Trauma impacts on elective services both in terms of displacing “elective” capacity as a result of acute inpatient trauma, but also from the perspective that due to under resourcing of trauma pathways, ambulatory trauma is treated as semi-elective and takes up unnecessary capacity within elective pathways. For immediate recovery and restart, systems will need to be developed to immediately ring fence elective capacity within existing HB and regional infrastructures including the acute sites.

The NCSOS team will be producing a suite of reports to cover the work that has been undertaken within the project:

NCSOS Report 2a-f – Pathway recommendations. These reports comprise of general recommendations (2a) that relate to the Orthopaedic system as a whole while sub reports (2b-f) will focus on specific sub-speciality requirements. These reports will feed into NCSOS report 3 and form the basis of collaborative national pathway development in conjunction with other professional groups. The aim is to create a standardised pathway framework through which care is provided across

Wales, which has the ability to adapt for necessary local and regional considerations.

NCSOS Report 3 – "The National Blueprint for Orthopaedic Surgical Delivery in Wales" will be published and submitted to WG and Health Board Executive teams in April 2022. This will provide a detailed set of recommendations required to redesign orthopaedic surgery based on clinical pathways and networks, consultant workforce profile and a comprehensive demand and capacity review. It will articulate the required capacity needed to remove the surgical backlog and provide sustainable services at subspecialty and procedure/ pathway specific level. It will provide options of delivery to inform national capacity planning and investment decision-making.

NCSOS Report 1 - urgent and immediate risks to and issues within orthopaedics. The overwhelming consensus amongst clinical teams is that the absence of any meaningful elective orthopaedic service throughout the pandemic, has resulted in patient harm and the continuing inability to restart meaningful elective orthopaedic surgery is causing further harm to the patients of Wales. In response to this, and at the request of clinicians across Wales, the NCSOS team agreed to provide this interim auxiliary report.

It is intended to be used by both Welsh Government and health board executive teams to reset thinking around Orthopaedic elective services and to undertake **immediate** actions to reinstate safe services which will minimise further patient harm and allow the Welsh population equitable access to services as is experienced by residents within NHS England (NHSE) and Welsh patients who receive commissioned treatment in NHSE.

3. Methodology

In order to develop a clinically viable blueprint for the delivery of sustainable orthopaedics, it was important to understand how it is currently delivered, the reasons behind delivery models and any variation that is part of the system. This information was gathered using sub-speciality questionnaires followed by a series of workshops with all clinicians within that sub-speciality invited. The workshops collated and debated the variation in current practice as well as outlined what best practice or ideal national pathways might look like.

The nature of discussions highlighted organisational, workforce, capital and geographical limitations on current service delivery. From this, a number of risk and issues were identified which impact on current service delivery and have been summarised to support immediate resolution. Some of these issues may be resolved or mitigated with the implementation of a long term strategy, but may require a different short term solution.

The risks and issues included in this report are within the following criteria: -

- Immediate/ short-term threat to the restoration of elective orthopaedic surgery.
- Posing a serious clinical risk to the patient through the deterioration of quality & safety standards outside of appropriate threshold
- Immediate threats to service sustainability.
- Risk through serious delays to treatment due to failure in delivery and performance.

Each risk and issue was assessed in accordance to standard risk management methodology. Those included in this report were identified as have the most serious impact for patients and the population of Wales if not rectified immediately.

The following sections outline the risk themes that are present in all services and organisations.

Appendix A summarised risks and issues which relate to specific sub specialities. Appendix B provides a summary of all key action points recommended throughout the report.

It is divided into the risk and issues for each sub-specialty group and pathway set, and a general National picture. More information on HB challenges will be detailed in the upcoming GIRFT reports, which will follow deep dive visits, and are being supported by the NCSOS project team.

4. General risks and issues.

Some risks and issues within the NHS Wales systems are commonly shared across health boards and sub-speciality teams. Some may also be apparent to other speciality teams. It is recognised that the following issues are being conveyed through the lens of orthopaedic consultant staff, however they represent system concerns and the impact on patients who have failed to be treated in the past 24 months.

The failure to introduce recommendations from the British Orthopaedic Society (BOA), GiRFT and the Royal College of Surgeons (RCS) on the benefits of separating elective and emergency services in the years leading up to the Pandemic have compounded the delivery issues that orthopaedics is facing. Clinicians in all health boards are reporting that the service and bed utilisation changes introduced during pandemic responses have become business as usual to provide general unscheduled care capacity. The perception is that there is little pressure or innovation being implemented to reduce admission length or improve efficiency of bed usage by unscheduled care teams.

The areas highlighted are those that are viewed as essential to the restart of elective orthopaedic surgery and are feasible to delivery, based upon best practice and GiRFT recommendations.

4.1. Inequitable access to in-patient beds for trauma

A fractured neck of femur (hip fracture) is one of the most common orthopaedic injuries that require inpatient care. Common in patients over the age of 60 these injuries require surgery within a maximum period of 48 hours. Without surgery mortality and morbidity outcomes drop significantly and permanently impact of the quality of life of patients. With orthopaedic services there are established best practice guidelines to support delivery of care.

All health boards currently report that delays in surgery due to the unavailability of beds has impacted on the ability to delivery care due to the prioritisation of medical unscheduled care presentations. It is acknowledged that hip fracture patients require admission to an orthopaedic ward due to post-operative infection control requirements, but the removal of surgical trauma wards has compounded this issue.

Action 1: Patients presenting with general trauma pathology e.g. hip fractures, must have equity of access with other general medical and surgical unscheduled presentations requiring inpatient admission.

Many health boards report insufficient trauma theatre capacity resulting in delays to surgical treatment for hip fractures and significant impact on elective orthopaedic activity, which is invariably forfeited to accommodate. There is reported disparity between this relationship when compared with other specialties whose emergency demand very rarely impacts on their elective service capacity. The result is a clinically unbalanced situation where trauma patients have less prioritisation for theatre capacity than non-orthopaedic elective cases. It also results in orthopaedic elective patients being displaced very far down the prioritisation order, even if objectively they are RCS FSSA equivalent to other elective surgeries taking place.

Action 2: Trauma theatre allocation must match HB demand and not be absorbed within elective Orthopaedic capacity.

Action 3: Trauma capacity to be provided within context of whole surgical unscheduled and elective activity, on a clinically priority basis.

4.2. Failure of secondary care outpatient services

Face to face outpatient reviews are essential to the delivery of elective services. In order to assess how a joint or musculo-skeletal system is functioning, clinicians need to be able to manipulate and observe movement. Care decisions are often made as part of a wider multi-disciplinary team delivery structure which is challenging to perform for initial consultations through virtual means. Alongside this, the delay in surgery will require many patients to be reassessed prior to surgery to identify whether the procedure the patient was initially offered is now suitable. This is essential for the prudent and efficient use of theatre capacity during restart. As services restart, there is the need for detailed patient reviews and discussions that are not felt to be conducive with decision-making via video or telephone appointments. However, the use of virtual clinics post operatively or long term condition management was not objected to by the clinical body.

Action 4: Reintroduction of face to face clinics for first outpatient and pre-surgery reviews of long waiting (delayed) patients.

Action 5: Establishment of the minimum outpatient capacity required to re-evaluate patients prior to surgery to avoid cancellation of procedure on the day.

Action 6: Video consultations to be focused on follow up or review clinics and supported by quality and performance monitoring via the National Outpatient Transformation programme.

The impact of repurposing many outpatient departments to support the Pandemic response is still being felt with many areas reallocated to other services. It is recognised that it is unrealistic to expect the return of all capacity immediately, however capacity to see and review appropriate elective urgent referrals and some acute injuries is paramount to maintaining quality and safety. Capacity could be delivered in alternative sites as long as appropriate support services are available[4], such as imaging, or the introduction of timely pre-clinic investigation pathways.

Action 7: Minimum level outpatient capacity should be reinstated immediately.

Consultant job plans have been changed to support other activities during the Pandemic. Services need to ensure that appropriate sessions are available to support new outpatient and pre-surgery review / consent clinics and that these are recognised within consultant job plans.

Action 8: Consultant job plans must recognise all necessary outpatient capacity.

4.3. Patient harm whilst on the Orthopaedic waiting list

Clinicians from all HB's are regularly witnessing patient harm and there is a growing quantity of qualitative patient statements describing deterioration and disability. Without the immediate re-establishment of appropriate elective capacity, patients will continue to come to harm.

However, alongside deterioration of orthopaedic conditions it is recognised that the population and patients have also experienced general deconditioning and decompensation from a health perspective. This is particularly exacerbated in patients with common long term conditions such as diabetes, cardiac health and hypertension. Coupled with psychological deterioration of having to deal with chronic pain and disability the impact on the complexity of surgery is challenging to quantify. What is known is that patients are sicker than they were and potentially requiring more interventions and longer recovery times than those without.

To reduce patient harm in the immediate and short term however, it is recommended that all health boards instigate or increase support to resourcing prehabilitiation and co-morbidity optimisation for patients on the orthopaedic

waiting list. The Royal College of Surgeons have published guidance on peri-operative optimisation which should be used to plan services[3],

It has already been noted that work has commenced in this area in many health boards, but resources have been redirected from established MSK services on a short term basis which has the unintended consequence of stretching resource to the detriment of patient care. These systems should be nationally funded and locally co-ordinated to avoid such consequences and weakening existing and future MSK pathways.

Action 9: Prehabilitation services need to be established to support patients on the waiting list for orthopaedics, in line with UK guidance.

Action 10: Services require national funding and local implementation to ensure equity of access and service delivery.

Action 11: While re-deployment of staff may be a short term solution, sustainable teams need to be planned to avoid weakening existing service requirements in MSK.

4.4. Restarting elective orthopaedic surgery

While introduced at the start of the Pandemic as a short term prioritisation tool by the RCS/FSSA, clinical prioritisation has continued to be cited as the denominator of access to theatre capacity. However, teams across Wales have reported that P2 and P3 orthopaedic patients are receiving proportionally less theatre time than similarly prioritised cases from other surgical specialities. In order to deliver the time-dependent care required, elective patients have had to be treated within trauma operating sessions increasing the demand pressures in the system.

Health boards must ensure that the provision of theatre capacity is transparent and is evaluated to ensure that orthopaedics are not disadvantaged – the common perception being that P2/3 orthopaedic patients are not as urgent as those of similar prioritisation from other specialities. Welsh Government scrutiny of elective activity on a routine basis would be welcomed.

Action 12: Theatre capacity for P2/3 orthopaedic cases must be provided immediately.

Action 13: Weekly sit-rep reports to be provided to Welsh Government of surgical activity, reporting the treatment function and clinical prioritisation.

To support surgery there must be beds for patients. Complex implant surgery such as that for hip or knee replacement requires **inpatient beds that are cohorted and ring-fenced.** This services two purposes: firstly it reduces the risk of infection to deep invasive surgical wounds, while allowing for surgical planning and flow. This is essential recommended practice in line with BOA and GiRFT standards and are being complied with, within comparable hospitals within NHSE.

Action 14: Ring fenced bed capacity to support inpatient surgery restart.

The impact and demand of trauma / unscheduled admission has been a recognised constraint on the efficient delivery of elective orthopaedics. GiRFT are recommending and have offered planning support to ensure that sites within each health board are reconfigured along elective and emergency lines, with the redeployment of staff to match available capacity. These sites would support the **high volume low intensity** (HVLC) surgery and manage patients post operatively through enhanced recovery units. There are nurse led models from rural DGH's in NHSE which GiRFT recommend as high quality models of care.

Action 15: Urgent designation of elective / emergency patient flow in line with GiRFT recommendations to support HVLC surgical pathways.

Action 16: Establishment of enhanced recovery units to increase the number of patients suitable for HVLC surgical pathways.

Low volume high complexity (LVHC) cases have no capacity nationally as patients commonly require additional surgical, anaesthetic or medical intervention as part of their surgery. The sites that provide this care are generally those under unscheduled care pressure so the scheduling of surgery is subject to cancellation and limited availability. This was also the case prior to the Pandemic, but it has exacerbated to the point that even within the large waiting list there is a two tier system to access treatment which disadvantages those with complex needs.

Regional models must be instituted immediately within units with ITU capacity but no other regional commitments targeted as the potential sites for regional LVHC orthopaedics. HD and CTM would fit this specification in South Wales. North Wales should review a single site model.

Health boards do not seem able to protect elective beds from unscheduled care pressures. Orthopaedic and support services are often spread over multiple sites which work in silos and leads to depleted resources. To maximise efficiency and provide the best treatment options for patients a reconfiguration towards a **mutual aid model** is required. The visibility often both the waiting list and delivered activity for this cohort needs both local and national exposure to ensure that no patient is left behind. A national MDT structure could support National prioritisation.

Action 17: Urgent designation of regional LVHC surgical hubs within existing acute sites to provide mutual aid surgical pathways for complex patients.

Action 18: Monitoring and reporting of the LVHC waiting list cohort and activity.

The delivery of orthopaedic surgery requires a highly skilled multi-professional team, but this team has been depleted and redeployed to support the unscheduled care pressures of the past two years. This has resulted in staff either not working in their previous role, or working in environments that are not designed for what they are asked to do. To ensure efficient services at restart, surgical and ward teams will all need the time to re-skill and get up to speed – many may not have supported surgical services for over two years.

Nationally there is (and has been) a recruitment crisis in theatre staff. The work profile pre-pandemic was skewed towards staff approaching retirement age and has been exacerbated by retirement applications increasing. Staff are also seeking employment in other HBs and the private sector. This continual movement is compounding the ability to restart services. Neighbouring HBs must co-ordinate and regionalise their current recruitment drives to minimise the impact on each other, develop efficiencies, enable mutual aid through regional passports, and create more attractive job opportunities.

For short term restart and recovery, Welsh Government should consider how all staff can be **incentivised to increase efficiency and** flexibility in service models.

This could include modifying financial models and moving towards annualised activity or regional / multi-site contracts.

It is recognised that the magnitude of staffing reconfigurations that are required cannot happen overnight. The staffing of multiple small elective units may not be possible in the next few years, and the need to provide regional service models requires a re-think on how we can use our workforce to the best effect, but also create a stable and attractive workplace. Less centres of surgery can make the most of the staff we do have to increase productivity. These strategic longer term considerations will be discussed in NCSOS report 3.

Action 19: Immediate collaboration between HBs to ensure co-ordinated staffing recruitment drives with workforce models that maximise flexibility, efficiency, regional working and supports support staff well-being.

Action 20: Immediate WG review of how theatre staffing groups are can be appropriately recognised and incentivised to support and improve efficiencies of the increasing volume of core and additional sessions that will be required to recover Orthopaedic services.

4.5. Reduction in administrative support

The redeployment of non-clinical / administrative staff was expected and understood during the first wave of the Pandemic. However, it has been reported that many of these roles have not returned, have been centralised, or transferred into the workload of a smaller team or to clinical staff.

The lack of experience and continuity in waiting list management and booking teams has begun to cause (where limited activity has returned) inefficient and under-utilised theatre lists. With the proposed changes to the way health boards and regions work together to provide services, consistent and dedicated teams become more important. Dedicated booking teams need to be re-established and will form a core part of regional management systems to identify long waiting and high risk patients.

Action 21: Orthopaedic booking teams (outpatient and theatre) teams need to be re-established and supported to work collaboratively within and across system boundaries.

4.6. Inconsistent and inefficient pre-assessment/consent services

The pre-assessment process to orthopaedic patients across Wales is not fit for purpose. The inconsistent delivery of services makes it challenging to ensure that patients are prepared and fit for surgery, often resulting in the need for multiple attendances and frustration.

The fundamental principles of informed consent are clear within GMC guidance[2]; the process of informed consent is a continuum and not a one off event. Job plans must include consenting clinics to facilitate this process. This may reduce general outpatient capacity but needs to be matched to surgical load within the job plan.

Action 22: Review of pre-assessment process locally to match theatre restart

Action 23: Reintroduction of consultant consenting clinics to match theatre capacity.

4.7. Orthopaedic anaesthetics

For complex patients with a higher anaesthetic risk it is key that an appropriate anaesthetist is involved in the patient's pre-assessment, ideally the anaesthetist should have a specialist interest in MSK. Internationally more and more surgery is moving towards day case and away from general anaesthetic but requires specific anaesthetic training and knowledge to administer.

All health boards report **inconsistency of approach across anaesthetic teams** and the lack of consistent multi-professional approaches which increases the likelihood of cancellations. It is imperative that a dedicated group of orthopaedic anaesthetists is identified in each HB to transform service delivery and the pre-assessment process.

With orthopaedics moving towards a reduced number of sites to deliver efficient surgery, consistency in anaesthetic decision making on approach and suitability of patients for day surgery or surgery on "cold" sites is a major barrier to service delivery.

Action 24: (Re-)Establishment of core orthopaedic anaesthetic services.

4.8. Mitigation of risk to loss of training status

The lack of surgery within orthopaedics has placed enhanced strain on the **delivery of training to the standards required by the deanery**. Without the return of elective surgery and arrangements for collaborative credits and experience gained in regional and collaborative working, the quality of training delivered will diminish. Some health boards are reporting that training numbers are being removed which will impact in their ability to delivery junior doctor rotas within financial constraints. The downgrading of Welsh training providers will be reputationally catastrophic for recruitment and service delivery over the next ten years.

Action 25: Incorporation of trainee requirements into regional / collaborative planning for elective delivery.

5. Sub-specialty risks and issues

This section highlight how the general risks and issues impact disproportionally on sub-speciality treatment areas and also highlights issues not previously raised.

5.1. Hip surgery

Complex hip surgery services are under critical threat due to the lack of access to theatres/beds for LVHC surgery. Complexity may be due to the required surgical procedure or due to medical co-morbidities or health status. Prior to the pandemic it was challenging to operate on these patients who are arguably those who require surgery most. Since March 2020 it has been almost impossible to deliver care. The volume of patients who have deteriorated from P4 urgency classification to P2 or P3 has grown and is expected to increase further until the backlog is cleared. Pre pandemic assumptions and planning for complex patients requires urgent review to ensure equitable treatment can be provided. Collaboration on management of cases may be required if capacity if not available locally.

Infected revision arthroplasty cases are rare but require specialist planning and intervention. Provision of services are already rationalised to a small number of specialist surgeons, but the introduction of a formal resourced MDT structure which includes microbiological input is essential to ensuring outcomes. All units have indicated they would welcome and actively participate in these arrangements.

Action 26: Ring fenced capacity for LVHC and infected/revision arthroplasty must be provided outside existing trauma capacity within all HB's

Action 27: A national Revision Arthroplasty MDT must be established with participation from all units and central funding for microbiological support.

5.2. Knee surgery

The need for LVHC planning and national MDT for infected knee arthroplasty mirror those expressed for hip surgery in section 5.1. and action 26 and 27 above.

Acute knee injuries require timely access to MDT orthopaedic assessment and treatment. Prior to the cancellation of elective services these patients would have been managed as urgent additions to elective outpatient and surgical lists so remained hidden. The lack of elective capacity has seen this workload re-badged as trauma without the commensurate resources to in place to co-ordinate and manage care. **Ambulatory trauma** requires a hybrid emergency / elective management approach to ensure appropriate care is delivered.

This patient group tends to be younger and of working age, with delays in treatment resulting in potential loss of livelihood and/or quality of life. The potential for expensive medico-legal recourse is considerable.

Acute knee services need to be resourced to support appropriate and timely outpatient, diagnostic and theatre capacity. These patients could potentially be treated regionally or across collaborative health board resources where local capacity is unavailable.

Action 28: Outpatient and surgical capacity for acute knee injury management must be made available in all HB's immediately

Action 29: All HBs must ring fence MRI capacity for acute knee patients.

5.3. Foot and ankle surgery

The early multidisciplinary management of diabetic foot disease is essential to prevent patients deteriorating to the point of requiring amputation. The NICE guidelines for diabetic foot disease provide the blueprint for service delivery. Where this was in place prior to the Pandemic, services have been stepped down as staff were redeployed. There is an urgent need to re-establish services in all health boards and to support patients through mutual aid agreements where local capacity is unavailable.

Prior to 2020 Wales was already an outlier in terms of amputation rates for diabetic patients, with amputation being an indicator for high population mortality rates. It is essential that monitoring and early intervention services are re-introduced consistently.

Action 30: All HB's must ensure diabetic MDFS in place immediately

5.4. Shoulder and elbow surgery

Similar to acute knee injuries, shoulder and elbow ambulatory trauma needs to be resourced to deliver timely care and treatment in order to prevent life-long impairment. There are reported cases in Wales of clinical negligence as a direct result of delays to shoulder surgery resulting in permanent harm and loss of employment. These cases will become more frequent if these services are not instated immediately.

Action 31: Outpatient and surgical capacity for acute shoulder and elbow injury management must be made available in all HB's immediately

Action 32: All HBs to commission ring fenced USS capacity for acute soft tissue shoulder and elbow injuries utilising local private providers if necessary

5.5. Hand and wrist surgery

Despite the predominant day-surgery delivery of hand and wrist surgery, services have not reinstated at any pace or consistency. This sub-speciality is ideal for HVLC services and some can be delivered via one-stop models or in high quality treatment rooms outside of theatre complexes. All providers should ensure that facilities are available to undertake surgery and maximise the use of resources.

Action 33: All HB should ensure immediate relocation of non-surgical services from existing day case theatre capacity

6. Health board specific Risks and Issues

The majority of risks and issues are common to all HBs and included in the above sections. However, through the NCSOS review process and the GiRFT deep dive programme (supported by the NCSOS team) some specific and local risks and issues have been identified. These findings will be included in the HB GiRFT reports which have been written with input from the NCSOS, but are highlighted here for completeness.

Action 34: All HB executive, clinical and operational teams to review their GiRFT reports and address the individualised HB recommendations.

6.1 Aneurin Bevan University Health Board

ABUHB serves the largest population volume in South Wales. It is unique in that pre-pandemic it had an elective Orthopaedics centre (St. Woolos) as well as services on four other sites, further compounded by the opening of the Grange in December 2020.

Currently trauma services across the health board are co-located into one acute on-call based at the Grange site. However, elective care remains split and has resulted in pressure to staff multiple units, wards and theatres. Fracture (acute) clinics, acute on-call and inpatient trauma services cannot be co-located, resulting in additional manpower requirements to support trauma which undermine the efficiencies of co-located trauma on one site.

While ABUHB been more successful than other health boards in restarting elective capacity, this remains less than 50% of the pre-pandemic activity and is predominantly day case due to the lack of ring fenced inpatient capacity on any site.

6.2 Betsi Cadwaladr University Health Board

BCUHB serves the whole of North Wales and the largest population of any health board in Wales. Orthopaedic services are split across three main DGH sites who work independently within a loose network arrangement.

No site has restated elective activity with outpatient, theatre and ward resources reallocated to support the pandemic response. No clear plans appear to be in place to return or replace required clinical spaces. Since August 2021 there has been no Clinical Director for Orthopaedics to provide oversight for the service, although the local site leads have endeavoured to fill this gap.

Recovery plans for orthopaedics appear to have centred on the commissioning of Diagnostic Treatment Centres for the region, but plans have been vague and developed in isolation from clinical teams and distrust in planning assumptions. These solutions would not be in operation for at least 12 months and no interim plan is in place.

BCUHB have longstanding commissioning arrangements with NHSE providers, but patient pathways are unstandardized and it is difficult to understand the rationale for prioritisation. This is impacting on the ability of services to develop demand and capacity models to support service development of more local services.

It is essential that BCU appoint an overarching HB Orthopaedic Clinical Director who in turn leads a clinical team that is embedded within the RTC project management structure. It is also strongly recommended that any strategic Orthopaedic vision for the RTCs is based on the final report recommendations of the NCSOS.

Immediate recovery mechanisms for elective Orthopaedics must involve collaboration between the three sites. At least one of these sites must have reinstatement of an elective Orthopaedics ward and theatres with immediate effect. This may require collaboration of trauma services to allow for elective resource to be freed up in the designated elective recovery site. The appointment of a Clinical Director will be essential to facilitate these discussions.

6.3 Cardiff & Vale University Health Board

In response to the pandemic, CAV have transferred some ambulatory trauma and thoracic surgery services to Llandough. This has reduced the elective Orthopaedic theatre capacity that previous occupied this resource. An additional reconfiguration in response to the pandemic was the relocation of fracture clinic services to the Llandough site, reducing elective outpatient capacity as a result. Relocation of some trauma pathways distant to the acute inpatient service at UHW means that additional staffing resource is required and multiple clinical teams at multiple locations within the HB. Elective sessions have been exchanged for trauma sessions in some clinician job plans which is a further barrier to immediate elective recovery. CAV also holds the unique position of the MTC for South Wales which was introduced during the pandemic. The MTC caseload has far outstripped the expected predicted demand resulting in further pressures on the UHW site in terms of patient flow but also in terms of staffing resource. Daycase surgeries have partially recovered due to the pre-existing CAVOC unit, however inpatient elective resource is approximately 50% of pre-pandemic and is constantly under threat from unscheduled care pressures.

6.4 Cwm Taf Morgannwg University Health Board

CTM is geographically positioned within the centre of the South Wales M4 corridor and therefore holds a unique position in that it has SLAs and informal clinical arrangements with both CAV and SB. Some of this is a legacy from ABMU. There is potential for ambiguous pathways consequently. It also has similar challenges to BCU due to lack of overarching CD for Orthopaedics and silo working.

It is recommended that a CD for CTM Orthopaedics is appointed, and collaborative working is encouraged between the three sites at both a trauma and elective level. This will allow for immediate reinstatement of elective services in at least one of the DGH Sites, for the benefit of the patient populations of all three DGH catchment areas.

A further risk highlighted by clinical leads from CTM is the absence of appropriate orthogeriatric support at all three sites. The impact of unscheduled care pressures on elective services has been more than emphasised by the pandemic; the absence of orthogeriatric support in these hospitals during the period of elective recovery creates further additional risks and pressures. Furthermore, there is an apparent reluctance by HB management to accept that such support is necessary.

An additional risk related to trauma care that also has profound implications on patient flow (and thus future elective recovery) is the additional burden of patients from Powys who would have previously attended Nevill Hall Hospital in Abergavenny, but now attend Prince Charles Hospital in Merthyr Tydfil due to the relocation of trauma service to the new build Grange site within ABHB.

6.5 Hywel Dda University Health Board

HD is a large geographic area. Consequently, services have developed over four distant DGH sites. This distant placement of HB resource limits the ability for split site working and collaboration. There is a CD for Orthopaedics which helps maintain governance across the four site services. The geographical location of HD however does limit subspecialist appointments and SLAs. LTAs and informal clinical network arrangements are in existence within SB and to a lesser extent CAV. These arrangements were fragile prior to, but have been compounded by, the pandemic; more sustainable solutions need to and will be explored in the final report of this project. Immediate challenges are posed at Hand & Wrist level as well as paediatric orthopaedics (beyond the scope of the NCSOS project). There is very little elective activity ongoing in HD in any of the four sites at present due to a combination of failed historical configuration of service provision (mixed acute and elective at 3 out of 4 sites) and the pandemic, with unscheduled care displacing elective beds and elective OPD capacity. The demand and capacity modelling for recovery is currently being led by the director of planning in collaboration with clinical and service leads, and an external provider. The intention is for new modular theatres to provide extended DSU provision in PPH which was hitherto unavailable. In addition, a ring-fenced elective inpatient ward for elective orthopaedics will be re-established in PPH for elective inpatient capacity for Carmarthenshire and Pembrokeshire patients. There may be a longer-term strategic role for PPH due to its co-located ITU and medical take as a regional arthroplasty LVHC unit, providing access to both HD and SBU patients. Plans to develop PPH must be mindful and in line with the NCSOS final report.

The IMTP for HD also includes a single on call site in the South of HD based at GGH Carmarthen (amalgamating current WGH and GGH on call rotas), although capacity at GGH and co-dependencies in other specialties currently prevent this.

Service reconfiguration at the BGH site is precluded by the Mid Wales Healthcare plan; agreement is in place to increase elective activity at BGH in line with its strategic objectives.

6.6 Swansea Bay University Health Board

SB and in particular Morriston hospital are unique with their remit as the SWW spinal surgery regional service, regional Paediatric centre and the sole provider of complex Orthoplastics management for the South Wales Major Trauma Network. The fractured neck of femur demand is also one of the greatest in the UK. Consequently, elective services are continually impacted. In 2019, pre-pandemic, the elective orthopaedic Morriston ward and service ceased for nine months due to unscheduled acute medical and medically fit for discharge pressures. The pandemic has only compounded what was already an exceptionally poor situation in terms of provision of ring-fenced orthopaedic beds. Neath Port Talbot (NPT) is being converted to an elective Orthopaedic Centre of Excellence as per the SB Clinical Services Plan. However, this has numerous challenges from a staffing, co & interdependency perspective, the latter due to its distant location from the acute site. It is currently therefore only able to manage low complexity work. Patients with complex surgical and medical needs still have very scant access to Morriston hospital, and even then, only through beds on a non-ring-fenced ward, with general surgical and other non-clean patients also being accommodated. Anecdotal evidence is building regarding increased infection rates consequently. Additionally, NPT is viewed as a buffer for overflow unscheduled pressures and medically fit for discharge patient cohorts which in turn provides a continual threat to the development of the elective site.

It is recommended that bed and theatre space in Morriston hospital is made available for high priority high complexity scheduled Orthopaedic work. This will require ring fencing a small number of beds. The alternative is that collaborative models with the upcoming PPH modular builds in HD are developed as soon as possible. It is also recommended that the plans to develop NPT are mindful and in line with the NCSOS final report.

At the time of initiating this project, Implant surgery/ arthroplasty was being managed “at risk” through the single mixed surgical non ring-fenced ward. However, concerns have been raised in regards to infection rates in the cohort of patients treated in this ward, and as a result all elective orthopaedic implant surgery has ceased in Morriston; a decision supported by specialist microbiology advice. It is strongly recommended that the HB supports the clinicians and their patients by immediate reinstatement of an elective ring-fenced ward through either (a) MDU ward (b) NPT interdependency enhancement (c) HD regional alliance.

7. Conclusion

The need for this report has been driven by the volume and variety of issues collected during our engagement with clinicians, which affect all of the HB's, sub-specialties and patients awaiting elective orthopaedic surgery in Wales. The numerous qualitative statements received, clearly highlight the harm being caused to patients as a result of the absence of access to elective orthopaedic care. Clinicians have a duty of candour to immediately highlight these real concerns through this report.

There are commonalities in the issues faced by all HB's, e.g., lack of elective theatre capacity, lack of ring-fenced beds, lack of outpatient capacity and core staffing fragilities. However, certain HB's have been more severely affected than others, particularly the more rural HB's such as BCU, HD and CTM where there has been virtually no elective activity since March 2020. This variation in capacity and inequitable access to elective orthopaedic treatment represents a "postcode lottery" that must be resolved immediately. This will require inter HB collaboration, strong central NHS Wales leadership and WG support/mandate. It is clear that governance structures within NHS Wales currently do not exist to deliver this level of operational change, therefore it is strongly recommended that a fully resourced National Orthopaedic Network is established at pace. This Network will also have an essential role in line with the principles of National Clinical Framework with regards to longer term strategic planning, which will be discussed in the final NCSOS report 3 "The National Blueprint for Orthopaedic Surgical Delivery in Wales".

The issues facing individual sub-specialties are also pressing; the lack of acute knee and shoulder pathways, diabetic foot pathways and pathways for medically (and surgically) complex patients from all sub-specialties in some HB's, is a cause of great concern with the potential for poor, life changing outcomes which are entirely avoidable.

A further commonality noted in submissions from clinicians is the ongoing effect on elective orthopaedic capacity as a result of general unscheduled care pressures rather than those arising out of the Pandemic. Many of the HB's report that changes to systems of unscheduled care that have occurred during the pandemic are predicated on continued utilisation of pre-existing elective orthopaedic estate, be it outpatient or inpatient beds. This poses a barrier to the necessary immediate recovery in all HB's not only from the loss of estate, but also from the perspective of necessary staffing levels to support trauma and elective services at multiple sites in some HB's (CAV and AB).

It is clear there is a vacuum in terms of over-arching clinical leadership within HB's (CTM and BCU), with individual hospitals working as silos. Consequently, engagement and communication between HB management and clinicians is deficient,

leading to recovery plans which have no clinical oversight and are not fit for purpose. Human resource is the most important yet fragile element of the orthopaedic system. It is imperative that all staff groups are enabled to work across entire HB's or regions, within multiple sites, to ensure equitable access to elective orthopaedic treatment for the benefit of patient safety, whilst simultaneously enhancing staff training, satisfaction and consequent sustainability.

The impact that the failure of elective services is having on the training of our future consultant surgeons must not be ignored. This important clinical group additionally provide invaluable trauma service provision. If disregarded this will result in current unscheduled care service collapse and an unsustainable medium to long-term future for trauma and elective orthopaedic services in Wales.

The final report of the NCSOS will concentrate on the strategic plan to ensure a best practice clinical pathway and a detailed data driven demand/ need: capacity blueprint model for the future sustainability of Orthopaedic surgery in Wales. This interim document however clearly highlights numerous critical issues and risks within the Orthopaedic system nationally that **without immediate action will result in service collapse beyond retrieval.**

8. Acknowledgements

We would like to express our gratitude and thanks to all those orthopaedic surgeons, clinical and management leads across Wales who contributed to the clinical reference groups listed:-

- Foot & Ankle
- Shoulder & Elbow
- Hand & Wrist
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- Hip
- Clinical Reference Steering Group (CRSG).

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9. Appendices

Annex 1 **Summary Sub Specialty Risks & Issues**	NCSOS Report 1 - Annex 1 SubSpec Ri
Annex 2 **Summary Key Actions**	NCSOS Report 1 - Annex 2 Summary Ke

10. References

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