# National Clinical Strategy for Orthopaedic Surgery

# Report 2a - General Strategic Pathway Recommendations

*(To accompany Subspecialty reports 2b-f)*

## 1. Executive Summary

There are numerous existing national and specialist society guidelines that exist in isolation across the Musculoskeletal pathway although in many cases these are not integrated into existing pathways or guidance. Furthermore, MSK pathways are unintentionally fragmented into primary care, MSK CMATS/MCAS and orthopaedic secondary care pathways; there is a need to develop pathways which are integrated across all settings.

This document provides recommendations on how best practice guidelines can be integrated into clinical pathways and how further pathways can be developed where gaps and need exist. When these recommendations are combined with the other Orthopaedic subspecialties this will lead to transformative pathway re-design. It is complemented by the NCSOS sub-specialty reports 2b-f and will feed into the NCSOS final report 3 *"The National Blueprint for Orthopaedic Surgical Delivery".*

A significant number of the action points and recommendations in this document require HB level intervention and accountability and are well within limits of feasibility. Other actions need central intervention and can only be led clinically, through the development of sub-specialty specific clinical reference groups (CRGs) working within the governance structure of a fully resourced Welsh Orthopaedic Network (W.O.N) with authority to implement and deliver change at scale. The CRGs and W.O.N are discussed further in NCSOS report 3.

The whole musculoskeletal pathway is considered within this document. It requires transformative change in parts to deliver a seamless journey for the patient. Allied health staff, for example, podiatrists, hand therapists and advanced physiotherapy practitioners are key to this. These staffing groups should be integrated within all stages of the pathway from primary care through triage to secondary and tertiary care clinics. Likewise, at the other end of the pathway, primary care nurses should be able to migrate from secondary care follow up to community follow up clinics to ensure raising of training and uniformity of standards of care. This will reduce variation, improve quality and reduce adverse outcomes.

Secondary and tertiary infrastructure requires urgent attention. Achieving estates standards in all HB's for OPD services such as access to plaster technician staffing and rooms, and radiology support is the bare minimum; we should be striving for far more for our patients and developing gold standard and innovative pathways at scale on a national level via the national CRGs and W.O.N, e.g. one stop USS within an OPD setting.

A large proportion of orthopaedic surgery is daycase based and needs a national network of suitably resourced day case units. There is also a large proportion of surgery that is delivered on an in-patient basis that requires appropriate ring fencing and protection from unscheduled care pressures in all HB's or regions. There are

also more complex pathway and patient groups that may need regional, supra regional or national approaches. All of these pathways and patients require fully trained staff, laminar flow theatres, implants and fluoroscopic support. This will be discussed further in NCSOS report 3 following a full consultant workforce and demand capacity review.

**The key enablers to address the recommended actions of this and the other sub-speciality reports 2b-f are:-**

1) **WG - Establish a Wales Orthopaedic Network (W.O.N.) with a national lead clinician to lead on pathway transformation.**

2) **WG - Establish national clinical reference groups, each with a dedicated national lead clinician, for the sub-specialties of Foot & Ankle; Shoulder & Elbow; Hand & Wrist; Hip; Knee.**

3) **WG – urgent review of AHP workforce, training and recruitment strategy review.**

4) **HB – review of OPD provision, in accordance with estates standards, in place in all HB's.**

5) **HB – review of acute injury pathways, for example, acute shoulder and elbow injury pathway to include OPD, imaging and treatment capacity outside general trauma provision.**

6) **HB/CRG - Establish low volume procedure clinical networks.**

7) **ALL - Develop HB & regional theatre capacity strategy, as set out in NCSOS report 3.**

8) **WG/HB's – review requirements to enable digital transformation including PROMS/PREMS.**

## 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.

At the outset of the NCSOS project, it was clear that its scope needed to include review of the whole pathways of care feeding into the surgical services. Reviewing surgical delivery alone would not enable the comprehensive transformation required to provide the scale of change needed to deliver high quality and sustainable Orthopaedic care for the population of Wales. This is especially pertinent for Foot & Ankle Surgery which has numerous pathways of care and interdependencies.

The NCSOS team have therefore developed a suite of reports to cover the work that has been undertaken within the project:

**NCSOS Report 1 –** *"Orthopaedic Recovery, Urgent - For Immediate Action"*. As part of the project processes, many critical and major risks were identified that needed immediate response, outside of the scope of the strategic role of the NCSOS. At the request of clinicians across Wales, the NCSOS team agreed to provide this interim auxiliary report.

**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 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.**

## 3. Methodology

This document has been developed in conjunction with all of the sub-specialty groups via workshops, to inform the Clinical Reference Steering Group for NCSOS. It is based on local, regional and national considerations, including WG strategy where relevant, and sub-specialty guidelines on best practice. E.g. Getting It Right First Time (GIRFT).

Section 4 reviews the patient pathway, which has been broken down into ten component parts, in order to standardise the methodology for all of the orthopaedic sub-specialties. This is to allow for co-production of pathways where appropriate, benefitting patients and the Musculoskeletal (MSK) system as a whole.

1) Primary Care
2) Initial Triage
3) Pre-Hospital intervention
4) OPD review
5) Diagnostics
6) Return OPD
7) Listing/ Waiting for Surgery
8) Pre-Assessment
9) Surgery
10) Post-operative

The key recommendations from this report are at (Annex 6) attached.

## 4. Identified national pathway issues

### 4.1 Primary Care

#### 4.1.1 Expectation of management prior to referral

Primary care assessment must include relevant history and examination. Attempts at conservative treatment must have been made for at least 3-6 months (unless clinical circumstances are exceptional).

The involvement and availability of AHP's to work within referral and treatment pathways is variable. To aid standardisation and improve integrated multi-disciplinary working AHP's should be embedded within MSK pathways alongside surgeons as part of an integrated pathway across primary, secondary and tertiary care. This will improve training and referral quality within primary care and improve the patient experience at all stages of the pathway. This should be underpinned by high quality patient information and consistent referrer guidance available at all

stages, as part of interactive evidence-based pathways, including imaging guidance where appropriate.

It is recommended that an MSK specialist triage e-referral management system be commissioned with sub-specialty and pathology specific sections, and the ability for two-way communication to aid feedback and optimisation of primary care management, prior to transfer to secondary or tertiary care. If properly implemented it is anticipated that this system will aid primary care rather than overburden.

Patients should be provided with access to appropriate validated information to assist in shared decision making regarding future treatment options once diagnosis is confirmed.

### 4.1.2 Making a referral for consideration for surgery

Any referral to the Trauma and Orthopaedic department should include:

- Medical history.
- Detail of conservative treatment to date.
- Detail of pain, deformity, skin condition, functional disability and impact on quality of life.
- Confirmation that the patient would be happy to have surgical intervention if deemed necessary (including the need to plan for recovery time and support from carers)
- Refer to pathology specific guidance for additional information required.
- Specific information requirements determined by sub-specialty CRG.

### 4.1.3 Optimising patients for surgery

Identification and optimisation in primary care of any medical problems should begin before or at the time of referral if it is felt they may affect fitness for surgery. This will prevent delays before surgery due to identification of reversible or optimisable conditions within secondary care. A dedicated e-referral system will aid this process by ensuring general and pathway/procedure specific factors are optimised prior to referral. Any difficulties in this management should be relayed by primary care directly to the surgical and pre-assessment teams. Likewise, if the patient is returned to primary care for optimisation following a review in secondary care clear instructions should be provided to primary care, on requirements and arrangements for follow up of any investigations by the returning specialty e.g. PAC clinicians for a specific issue identified at time of anaesthetic review.

Any patient being referred for surgery should be provided with advice on smoking cessation and general health improvement advice within primary care and outside agreed MSK pathways. We further recommend that lifestyle factors should not be used as thresholds to onward referral, however the opportunity to address these should be taken at the time of all interactions within the pathway.

**Action 1:** MSK pathways should be integrated via a digital platform with clear e-referral pathways, imaging guidance, patient related information, PROMS, PREMS collection at all stages of pathway, Registry entry, and digital consenting platform.

**Action 2:** Trial of non-operative management must have been considered prior to referral where clinically appropriate.

**Action 3:** Identification and optimisation in primary care of any correctable medical problems should begin before or at the time of referral if it is felt they may affect fitness for surgery.

**Action 4:** Minimum data set should be provided in referral to secondary care – Sub Specialist CRG to define dataset which will inform nationally commissioned sub specialty clinical prioritisation tool.

### 4.2 Initial triage

Improved e-referral systems at primary care level with clear referral guidelines and pathways will allow for more effective triage into secondary care. This should be standardised nationally with specific inclusion and exclusion criteria based on pathology specific guidance.

Further improvements of national sub-specialty pathways should be the driven by:

- Reinstatement of national Sub-specialty CRG meetings as part of a National Orthopaedic Clinical Network
- Local/regional sub-specialty MDT meetings as part of formal service specification.

A standardised national system for collection of PROMS & PREMS must be commissioned centrally for all of Orthopaedics to monitor outcomes from **all** interventions (including non-operative) at any point of the MSK pathway. This data surveillance and collection should be embedded within the commissioned integrated MSK pathway and digital platform.

The involvement of all junior and student AHP's within the sub-specialty MDT would improve clinical experience and clinical practice; this could be provided by way of

secondments or formal placements. The therapist workforce of the future can be nurtured and existing clinicians upskilled to provide this aspect of treatment pathways.

Integrating primary care practitioners into triage sessions will improve training and referral quality within primary care and improve patient experience at all stages of the pathway.

**Action 5:** AHP's should be embedded within MSK pathways as part of an integrated pathway within primary, secondary and tertiary care. A national review of the role of triage and treatment services for all Orthopaedic sub-specialties should be established.

**Action 6:** Condition specific guidance should be embedded in all local and regional MSK pathways.

**Action 7:** Training and placement programs for existing AHP's, junior and student staff, to gain experience in sub-specialty specific management, under supervision of sub-specialty consultants.

### 4.3 Pre-hospital intervention

The Patient pathway should be defined by the requirements at sub-specialty level, including appropriate imaging, and these are set out in the accompanying sub specialty documents. Lifestyle and prehabilitation/optimisation programmes should be initiated within primary care and should not form part of the MSK pathway.

The role of CMATS/MCAS/MSK triage and treatment services in particular is undefined in some Heath Boards at present and there is wide variation across Wales in relation to its role and function creating an inconsistent patient experience. This requires review nationally.

Patients on a waiting list should be able to access clinical advice in the event of worsening symptoms and their position on the waiting list should be transparently communicated; this could be provided via an integrated digital platform.

**Action 8:** Prehabilitation and optimisation pathways should be public health primary care measures outside of MSK pathways.

**Action 9:** A national review of MSK triage and treatment services and their position and function within patient pathway.

**Action 10:** Develop patent facing digital information platform as per action 1 above.

## 4.4 Outpatient Review

The pandemic resulted in the removal of orthopaedic rooms in outpatients, as space was converted for use as part of the pandemic response in the majority of HB across Wales. This has resulted in a lack of space in order to aid restart, together with a perceived indication that all outpatients can be converted to virtual.

It is recognised that virtual clinic (VC) systems do not lend themselves to initial secondary care outpatient assessments. Face to face (F2F) provision must be re-established in all HB's to meet demand in a clinically safe time frame. Outpatient clinic areas must be appropriately designed and resourced to support MDT working, and allow appropriate AHP's to join clinics as required by each sub-specialty. They should have access to integrated clinical IT systems. Clinic templates must be standardised and recognise BOA guidelines. National estate standards should be adopted and implemented within HB's or within a regional network (Annex3)

All new patient clinics should work within the British Orthopaedic Association (BOA) framework, together with a review of clinically appropriate templates for specialist multi-disciplinary clinics e.g. Diabetic Foot MDT in F&A. Pathology specific guidelines detail the expected activity to be provided in the initial clinic appointment, but generically will include a detailed clinical history and examination and relevant radiology investigations.

Plain radiographs should be requested at the MDT triage stage to ensure that the appropriate imaging is available at the time of the patient presenting to clinic to aid patient flow. This mechanism will only be possible once the recommended MDT triage systems are in place, otherwise there is risk of inappropriate radiological investigations being requested. Any triage requested X-rays must be to a national standardised protocol. PACS will need to ensure availability of all X-rays accepting that some will have been performed in other HB's for regional services.

All outpatient clinics should involve review and inputting of registry, NJR, PROMS/PREMS data to a nationally recognised specification. Appropriate human resource must be funded to deliver this work. It is essential for the future sustainability of value based and prudent healthcare and could be through non-clinical administration staff, shared with other Orthopaedic specialties, or through integration of triaging services staff within secondary care.

**Action 11:** Face to face (F2F) provision must be re-established for new patient appointments, in all HB's to meet demand in a clinically safe time frame.

**Action 12:** All OPD facilities should be appropriate to promote MDT working and in accordance with national estate standards.

**Action 13:** All patient should be registered on appropriate registry with use of PROMS/PREMS.

### 4.5 Diagnostics

It is recognised that USS reporting and performance can vary and consistency should be improved through national standards and training programmes. This will require a national workstream with the relevant stakeholders.

Lack of MSK USS and MRI capacity nationally is evident. Additional resource ring-fenced for MSK imaging must be reviewed at HB, Regional and national level. Commissioning from private providers should be considered, as this infrastructure is already in place, and can be operationalised with relative ease and speed.

National imaging protocols for plain radiographs, USS, MRI, CT and CT spectroscopy should be embedded within MSK pathways and implemented in all HB's. Agreed standards for referral to imaging, and imaging to reporting timescales must be agreed and monitored nationally, to identify and address variation.

Sub-specialty specific imaging guidance must be embedded within an integrated MSK pathway and digital platform.

**Action 14:** Increased ring-fenced resource for MSK MRI and USS must be reviewed at HB, Regional and National level. Commissioning from private providers should be considered on a short to medium term basis.

**Action 15:** National review of MSK radiology provision must be undertaken.

**Action 16:** Agreed standards for referral and reporting timescales for MSK imaging must be adopted.

**Action 17**: Specific imaging guidance must be embedded in all sub specialty pathways.

## 4.6 Return OPD

We recommend that the majority of follow-up appointments should be virtual wherever clinically appropriate. We recognise that each HB has different geographical and population factors to be considered; therefore, the minimum requirement is that there are agreed criteria within each HB. We also recommend the development of nationally agreed follow-up protocols to reduce variation and utilisation of OPD capacity.

The consenting process is a continuum, not a one-off event. It should begin at the time of referral and evolve as the pathway progresses. It should be a key component of the follow up review if surgical intervention is decided. We recommend a clinically led, national procurement process for digital consenting and a patient information system that promotes shared decision making throughout the entire pathway; this should form part of the integrated MSK pathway and digital platform.

**Action 18:** The majority of f/u appointments should be virtual (VC) where clinically appropriate, with standardised national follow up protocols. VC processes should have associated performance and quality metrics to monitor progress.

**Action 19:** Consenting processes in OPD must be according to GMC guidance and adoption of specific consenting clinics where necessary [1].

## 4.7 Listing/ Waiting for Surgery

A Consultant (FRCS T&O) must be involved in the shared decision making process for surgery, with the patient. In some HB's it is recognised that non consultant grade surgeons list the patient for surgery. In such circumstances, processes should be in place such that a team approach is employed to ensure a consultant T&O is involved in this process.

Nationally agreed information documents about the proposed surgery to assist shared decision-making can be a bridging solution to a digital shared decision making platform.

National clinical prioritisation methods taking into account: pain, personal functional limitation, socio-economic factors, potential to benefit from treatment and consequence of delay should be developed at sub-specialty level; this will require a national workstream in each sub-specialty CRG.

All HB's must have protocols and resource, including bed & theatre space, in place for patients requiring immediate admission e.g. Infection.

**Action 20:** Consultant presence closer to the front end of the pathway, and involvement in MDT discussions should be recognised at job plan review

**Action 21:** Nationally commissioned sub-specialty clinical prioritisation tools should be developed and deployed.

Pooling of waiting lists has been adopted in many health boards at haste as a response to the pandemic. There needs to be urgent consideration of patients that are suitable for pooling (for example, high volume low complexity). The requirement to **re-review patients** prior to surgery provides the opportunity to rebalance consultant waiting lists and established considered and national pooling protocols to support the movement towards elective centres, including conversations with patients regarding treatment by the *team* rather than an individual. Lessons from high volume centres such as SWLEOC can be enacted here.

Advice and support from experienced administrative waiting list staff with understanding of the relevant sub-specialty should be in place in each HB so as to reduce inefficiency due to a lack of understanding of how lists are made up for theatre, repeated unnecessary appointments, and reduced appropriate administrative validation, resulting in inflated numbers waiting at each stage, duplicate entries etc.,

All patients should have PREMS, PROMS at all stages of the treatment pathway as per recommendations above, and an appropriate national PROMS and PREMS platform, embedded within the digital MSK pathway should be commissioned.

**Action 22:** Clinical teams should undertake rebalancing of consultant waiting lists through the reviewing of patients ahead of surgery process.

**Action 23**: National sub-specialty guidelines required development to ensure consistent and robust decision making regarding pooling.

**Action 24:** All HB's should review WL teams to ensure specialty specific staff allocated with the relevant expertise.

**Action 25:** Commission a national digital platform to support accurate data collection including PROMS/PREMS.

Patients currently waiting for treatment are already waiting an excessive length of time with most waiting over two years and some likely to wait in excess of five years prior to receiving their treatment. During this time further deterioration in their general health is more likely than not. Specific programs are required to ensure these patients are offered all resource to ensure that deconditioning is minimised. Specific access to prehabilitation programmes for patients must be commissioned in all HB's

Paper based systems for collection of inpatient data are out-dated and are inappropriate for clinical and corporate governance, commissioning and strategic planning purposes. Some HB's are adopting electronic systems but are doing so without full integration into existing HB IT systems. We recommend that all waiting list "cards" are digitalised within a standardised nationally commissioned digital MSK platform, which is fully integrated with the EPR and patient outcome data collection systems; minimum data sets must be included with inclusion of OPCS coding. There are significant discrepancies and inaccuracies in OPCS and HRG coding. A national review of coding workforce and training must be established. Significant investment in clinically trained coders is required, with coders integrated into clinical teams to improve data collection.

**Action 26:** Any prehabilitation and optimisation programmes instituted post pandemic should be separately funded and resourced and once established, exist outside MSK pathways.

**Action 27**: A national review of coding workforce must be undertaken.

### 4.8 Pre-assessment

As with many other staff groups, anaesthetists were redeployed to other areas at the onset of the pandemic The lack of dedicated orthopaedic and sub-specialty specific anaesthetic teams is creating significant inefficiencies in the pre-assessment process (and potentially reduced quality and safety). These teams must be re-established in all HB's.

It is recommended that any PAC process must be able to clearly identify which patients can be appropriately managed in the following settings according to perioperative 30-day mortality risk score calculated by validated risk scoring tool e.g. SORT/ACS; and the criteria below is provided as an example only. An MDT of PAC nurses, anaesthetists and surgeons should work together to develop and formulate these processes to be rolled out nationally.

- 1 ward setting without PACU or HDU provision (<1% risk)
- 2 ward setting with PACU or HDU provision (<5% risk)
- 3 ward setting with critical care provision (>5% risk)

Without this process, under-utilisation as a result of on the day cancellations will remain commonplace.

An anaesthetic workforce review should be carried out to ensure equitable access to regional anaesthetic techniques. HB's where significant experience in regional anaesthesia techniques already exists could become centres of excellence for training.

Clinical supervision of a patient returned to primary care for optimisation or correction of medical factors preventing safe admission following a review in pre-assessment should be retained by pre-assessment clinicians and should not default to the listing T&O consultant. Clear instructions should be provided to primary care on requirements and arrangements for follow up of any investigations by the returning specialty. A robust, nationally commissioned and implemented Digital referral system is necessary to facilitate this.

Consideration should be given to a one stop clinical visit encompassing final pre-assessment nurse led check, final shared decision making conversations with T&O consultant and completion of all relevant admission documentation to facilitate DOSA and same day discharge.

**Action 28:** National programme of pre-assessment to be commissioned by Welsh Government to bring best practice from across Wales together.

**Action 29:** Dedicated orthopaedic and sub-specialty specific anaesthetic teams must be re-established in all HB's.

**Action 30:** Development of sub specialty appropriate pre-assessment processes to ensure safe regional anaesthesia, and identify which patients can be appropriately managed in a short stay unit or inpatient stay who may require GA to increase efficiency and avoid on the day cancellation of surgery.

## 4.9 Surgery

### 4.9.1 Future state and bridging solutions

The long-term blueprint for the infrastructure and configuration of all Orthopaedic Surgery will be detailed in NCSOS report 3 - "The National Blueprint for Orthopaedic Surgical Delivery in Wales", once all demand and capacity modelling work has been completed.

However, whilst the long term blueprint is realised each HB must be able to provide the necessary infrastructure to deliver surgical procedures in the appropriate setting, including day case, extended day case, and inpatient treatments within laminar or non-laminar flow theatres according to sub-specialty requirements.

If there are HB challenges to this in the short term, regional alliances must be established in order to share resource and ensure equitable access to patients in every area of Wales.

As part of a bridge to the long-term blueprint, if HB's are developing new/ modular build strategies, these must be in alliance and co-ordination with neighbouring HB's. HB's must not develop capital build strategies without regional context.

**Action 31:** HB's must not develop capital build strategies without regional context.

There is a reduced capacity nationally for medically complex patients; this capacity can only currently be provided in the setting of a large DGH or teaching hospital due to the interdependencies required to care for this patient group. This capacity is generally reserved for unscheduled care and cancer surgery, with orthopaedic surgery considered a lower priority in most, if not all, HB's. All HB's and regions must collaborate to ensure equitable access to medically complex beds for all patients.

Longer term contractual relationships (rather than short term spot contracts) with the private sector should be explored at national level, to enable the private providers to enhance and invest in their infrastructure to provide more sustainable NHS capacity in the immediate to medium term, until the future NHS Orthopaedic blueprint is realised.

The delivery of minimum volumes per theatre list and the concept of high volume low complexity (HVLC) surgery as a means of ensuring maximum utilisation of

theatre lists has been strongly embraced within NHS England and infrastructural configuration which provides this within NHS Wales must also be considered. However, appropriate infrastructural configuration for patients requiring Low volume high complexity (LVHC) surgery must also be considered within the blueprint for future orthopaedic services. Such facilities will require careful consideration of out of hours medical and surgical supervision, the need for provision of monitored beds, HDU/PACU provision and transfer arrangements to a level 3 critical care setting.

**Action 32:** All HB's and regions must collaborate to ensure equitable access to medically complex beds for all patients.

**Action 33:** Each Sub-specialty CRG should review all listed procedures in the BADS directory (Annex 1) to maximise daycase volumes.

**Action 34:** Engagement of senior clinicians in theatre list planning to ensure appropriate utilisation of theatre capacity by way of one stop shop approach or HVLC sessions and also allow dynamic list planning according to complexity and clinical urgency.

**Action 35:** Longer term contractual relationships (rather than short-term spot contracts) with the private sector should be explored at national level in the immediate to medium term.

### 4.9.2 Resource requirements.

There appears to be a universal lack of orthopaedic scrub staff in all HB's. As part of the next phase of the wider programme, a detailed national Orthopaedic nursing workforce review is necessary, to ensure training and recruitment of this critical workforce group is co-ordinated across regions.

All inpatient ward patients must be cared for by a 24/7 doctor competent in general medical ward care and ability to recognise perioperative medical and surgical complications.

**Action 36**: All surgical procedures should be performed by, or under the supervision of a Consultant FRCS T & O with the appropriate specialist knowledge, and be able to demonstrate regular performance of specialised procedures.

**Action 37:** All inpatient must be cared for by a 24/7 doctor competent in general medical ward care and ability to recognise perioperative medical and surgical complications.

**Action 38:** A detailed national Orthopaedic nursing workforce review must be established to provide appropriate resource to outpatient and ward areas.

### 4.10 Post-operative

The contribution of an efficient day surgery team with the correct expertise cannot be underestimated. This includes the booking staff, preoperative assessment nurses, receptionists, theatre teams, recovery and discharge staff supported by the surgical multi-disciplinary team (Annex2). A national review of day surgical staffing models is needed.

Ward based therapies provision must be provided seven days a week with therapy teams managed within orthopaedic directorates.

Minimum standards for the constituent parts of the post-operative MDT need to be agreed at a national level via sub-specialty CRG, and implemented locally by HB's or within a regional network.

Increased daycase workload during the recovery period will mandate additional post-operative support in terms of pain management. Suitably qualified pain management specialist nurses should be allocated to recovery facilities to ensure prompt discharge. Discharge criteria should be in place to ensure goal determined nurse led discharge becomes the routine.

**Action 39:** Inpatient and day case therapy teams should be managed within orthopaedic directorates.

**Action 40:** Implementation of GiRFT day surgery guidance with principle of maximising same day admission and discharge.

**Action 41:** Minimum standards for the constituent parts of the post-operative MDT need to be agreed at a national level via sub-specialty CRG, and implemented locally by HB's or within a regional network.

**Action 42:** All OPD areas should align with national estate standards [2]

**Action 43:** Adoption of goal determined, nurse led discharge processes.

## 5. Consultant Workforce Review

There are currently 182 Consultant Surgeons working within Orthopaedic Directorates in Wales.

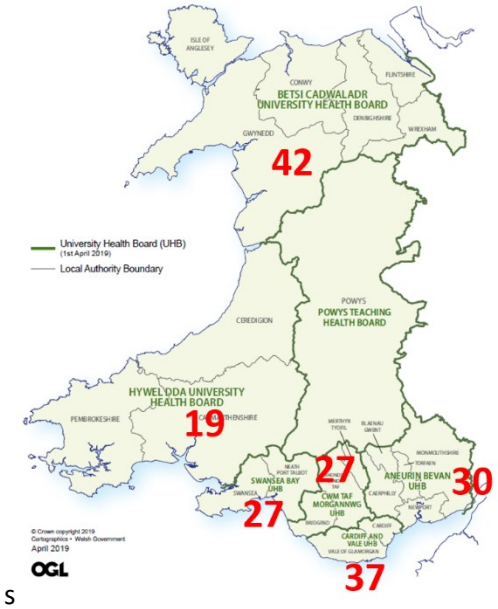


Fig. 1. Distribution of Orthopaedic Surgeons in Wales. (inc spines/paeds/trauma)

The table below provides sub-specialty split of the Consultant workforce, together with a 0-5 and 5-10 horizon scan based on proposed retirements.

| Health Board | Sub-Specialty | | | | | | Horizon Scanning (Total) | |
|---|---|---|---|---|---|---|---|---|
| | Total | F&A | S&E | H&W | Hip | Knee | 0-5yrs | 5-10 |
| AB | 5.0 | 0.7 | 0.67 | 0.8 | 2.0 | 2.0 | 5.1 | 4.3 |
| BCU | 6.0 | 0.9 | 0.71 | 1.3 | 2.8 | 3.1 | 8.5 | 7.5 |
| CAV | 7.3 | 1.0 | 0.80 | 0.8 | 1.6 | 1.6 | 5.2 | 4.4 |
| CTM | 6.0 | 0.7 | 1.11 | 0.7 | 2.2 | 4.0 | 7.8 | 6.0 |
| HD | 4.9 | 0.5 | 0.51 | 0.8 | 3.1 | 3.3 | 6.7 | 6.0 |
| SB | 6.9 | 1.0 | 0.77 | 0.8 | 1.3 | 2.0 | 4.6 | 4.7 |

**Table 2. Consultant Orthopaedic workforce in Wales per 100,000 population**

It should be noted that some surgeons have more than one subspecialist interest hence this data is only reflective of available consultant skill set, not available time. There are potential fragilities in some HB's which will be detailed in the sub-specialty reports.

A trainee survey is being conducted to horizon scan for future surgeons' sub-specialist interest working in NHSW. The output of this survey is included in the final report.

## 6. Conclusion

The strategic recommendations in this document apply to all Orthopaedic sub-specialties. The opportunity to review Orthopaedic services across Wales at sub-specialty level has highlighted the importance of sub-specialty requirements when designing a future sustainable surgical model. One size does not fit all.

There is a need to implement these recommendations as part of a national approach to transform musculoskeletal services and ensure appropriate and evidence based utilisation of clinical resources and thus improve patient care. This will require a fully resourced orthopaedic network embedded within the NHS executive structure and in line with the National Clinical Framework (NCF). This network must develop comprehensive nationally standardised whole pathway orthopaedic service specifications in line with the recommendations of this project to underpin the services through formal commissioning.

All HB's must provide access in the short to medium term for day case, and inpatient surgery and partnerships with private providers must be explored as a bridging solution in the medium term.

It is required that the recommendations in this document be integrated with the supporting sub-specialty CRG recommendations and implemented as part of a national approach to transform musculoskeletal services to deliver high quality patient care adhering to prudent and value based principles. The final NCSOS report 3 "The National Blueprint for the delivery of Orthopaedic Surgery in Wales" details this integrated service model.

## 7. Summary Key Actions (Annex6)

## 8. Acknowledgements

We would like to express our gratitude and thanks to all those clinicians who have supported the NCSOS project by contributing to workshops, completing supporting proformas/paperwork, and providing feedback and support to these interim documents and final recommendations. A full list is attached at (Annex 4)

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## 9. Appendices

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|---|---|
| **Annex 1**<br>**BADS Directory** | BADS.pdf |
| **Annex 2**<br>**GiRFT National Day Surgery Delivery Pack** | National-Day-Surge<br>ry-Delivery-Pack_Aug |
| **Annex 3**<br>**HBN 12 NHS Estates Outpatient Dept. Design** | HBN_12.pdf |
| **Annex 4**<br>**List of Orthopaedic Surgeons in Wales** | Annex 4 - Wales<br>Orthopaedic Surgec |
| **Annex 5**<br>**Sub-Specialty Recommendation Reports** | The files are too large to embed and will be forwarded separately |
| **Annex 6**<br>**Generic Key Actions** | NCSOS Report 2a<br>Annex 6 Summary G |

## 10. References

[1]Decision Making and Consent – Guidance on professional standards and ethics for doctors – General Medical Counsel

[2]HBN_12, NHS Estates Out-Patients Department, Department of Health