Archwilio Cymru
Audit Wales

Orthopaedic Services in Wales – Tackling the Waiting List Backlog

Report of the Auditor General for Wales

March 2023

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Mae'r ddogfen hon hefyd ar gael yn Gymraeg.

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Summary report

Context

1 Orthopaedics is the branch of surgery that relates to musculoskeletal conditions. Common surgical procedures include hip and knee joint replacement, and diagnostic intervention such as arthroscopy. Orthopaedic surgeons tend to sub-specialise focussing on areas such as major joints, or foot and ankle, shoulder, or wrist.

2 NHS Wales orthopaedic spend had grown year on year to 2019-20 peaking at nearly £396 million. The pandemic saw reduction in activity and spend the following year. But even with the increases in spend pre-pandemic, the size of orthopaedic waiting lists was one of the biggest challenges facing the NHS in Wales. This challenging pre-pandemic position has further deteriorated because of the impact of COVID-19 on planned care activity. In November 2022, of the 748,271 people on the NHS waiting list in Wales, 101,014 were waiting for orthopaedic services.

3 At the time the UK went into lockdown in March 2020, we were concluding our work to follow up progress against our 2015 reports on waiting times for elective care and orthopaedic services. Across both reviews we had found the same story: many patients still face long waiting times. Some progress has been made in specific areas, but we had not seen the sorts of whole system change that is needed to make the planned care system sustainable.

4 In September 2020, we published a report setting out Ten Opportunities for Resetting and Restarting the NHS Planned Care System. We then prepared a broader commentary on Tackling the Planned Care Backlog in May 2022.

5 This report provides a commentary on orthopaedic services. It describes the scale of orthopaedic waits, changes in demand, aspects of service capacity and some of the recent nationally coordinated work to modernise services. The report also sets out key actions NHS Wales needs to take to tackle the challenges in orthopaedic services. In some instances, we use long term trends to help illustrate change over time.

Key messages

A note on patients and pathways

Throughout this report we talk about patients waiting for treatment. Our figures are based on NHS Wales's 'open' referral to treatment measure. The measure counts the number of pathways which have started but not yet completed treatment, rather than people. Each pathway represents a patient waiting but patients may have more than one health condition and therefore be on the waiting list more than once. As a result, the total number of people waiting for treatment will be lower than the total number of pathways.

6 Meeting demand for planned orthopaedic services has been a significant challenge for the NHS in Wales over the last 20 years. The impact of COVID-19 has elongated what was already a lengthy waiting list, such that patients are now facing exceptionally long waits to be seen and treated. For many people this means living in pain and discomfort, with a life-limiting condition.

7 Proportionately, there are more than twice as many people waiting in Wales for orthopaedic services as there are in England. In fact, proportionately, there are more people waiting over 36 weeks in Wales than are waiting in England in total[1]. Month on month, the orthopaedic waiting list has been increasing, peaking with 102,699 patients on the waiting list in September 2022. Referral rates dropped during the pandemic, and we estimate that there are around 135,000 potentially 'missing' referrals that could come back into the system, putting further pressure on the waiting list.

1 Statement by the British Orthopaedic Association, on England and Wales Trauma & Orthopaedics Waiting Times Data for March 2022. Direct comparisons are not available with Northern Ireland and Scotland due to differences in the way in which waiting lists are reported.

8 Services have been slow to restart as the immediate impact of the pandemic has lessened, operating on average at around 60% of pre-pandemic activity levels. There is unexplained variation of orthopaedic waits across Wales depending on where you live and the type of procedure you are having. Necessary infection control regimes will continue to have an impact on patient throughput in settings such as operating theatres, but there is scope for current capacity to be used more efficiently by making appropriate use of day case procedures and looking to safely reduce lengths of stay.

9 In the past, the Welsh Government has allocated temporary additional monies to health boards to try and fill the gap between capacity and demand. Whilst this resulted in short term improvements, it did not achieve the sustainable changes to services that were necessary and referral to treatment time waiting list targets[2] for orthopaedics have never been met since the targets were first established in 2009. There needs to be a realistic assessment of capacity. Funding for orthopaedic services has not reflected growing demand and with a predicted 27% growth in over 75s between now and 2030, services need to be sustainably designed to meet that need.

10 We have repeated the wider modelling exercise presented in our Tackling the Planned Care Backlog report in May 2022 for orthopaedic services in order to estimate how long it will take to recover these services. Our optimistic scenario modelling suggests that it could take three years to return orthopaedic waits to pre-pandemic levels. This is based on both a significant drive on community-based prevention, which has shown to have a positive impact on demand, and a 5% increase in orthopaedic surgical capacity and activity compared to pre-pandemic levels, noting that current activity is below pre-pandemic levels. Our more realistic scenario indicates that it could be nearer to five years, and our pessimistic scenario indicates that services may never return to pre-pandemic waiting list levels. The scenarios highlight the scale of the challenge facing orthopaedic services in respect of managing demand and building additional capacity.

11 There is some hope, however. NHS Wales has commissioned an in-depth review of orthopaedic services with the Getting It Right First Time team[3] outlining numerous service efficiency, effectiveness, and productivity improvements for acute orthopaedic services. They set out a comprehensive suite of recommendations in their national report and have also provided reports and recommendations to each of the health boards in Wales. Their work sets out the immediacy and urgency needed.

2 95% of patients waiting no more than 26 weeks from referral to treatment, and no one waiting over 36 weeks.

3 Getting It Right First Time is a national programme designed to improve the treatment and care of patients through review and benchmarking.

12 Aligned to this, the Welsh Government commissioned the Welsh National Orthopaedic Society to prepare a National Clinical Strategy for Orthopaedics. This thorough and honest appraisal of the current position and service options for the future sets out in the strongest terms the perilous state of services and gives a clear clinical voice on what needs to be done. It will require brave and bold leadership at a ministerial level all the way through to operational and clinical leaders in hospitals to deliver it.

13 From our discussions, the Welsh Government and NHS Wales recognise the scale of the challenge, but lessons must be learnt from previous initiatives. The national strategy developed by the Welsh Orthopaedics Board must be accompanied by buy-in from local clinical teams to ensure that changes are embedded and sustained.

14 A renewed focus on driving efficiencies is needed to maximise already stretched resources but this cannot be done in isolation. A whole system focus is needed to ensure that other services that support the orthopaedic pathway are also working effectively, including primary, community and diagnostic services. New technology and improved estate need to be prioritised and health boards must work together to develop regional solutions to help tackle the backlog. In the context of many patients having to wait a very long time for their treatment, information on experience and outcomes also needs to be at the heart of decision making.

> Securing timely treatment for people with orthopaedic problems has been a challenge for the NHS in Wales for many years, with COVID-19 making this significantly worse. It is positive to see that there is a clear commitment to improve orthopaedic services, but urgent action is needed to secure short-term improvements in waiting times to minimise how long people wait in pain and discomfort, as well as creating more sustainable longer-term improvements.

Adrian Crompton
Auditor General for Wales

Key facts[4]

37% of people waiting **over 12 months** for orthopaedic treatment[5]

101,014 Total number of people on an orthopaedic waiting list

60% of people waiting **over 26 weeks** for orthopaedic treatment

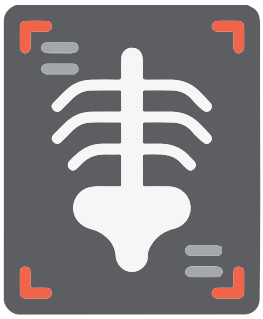
The number of people waiting for orthopaedics accounts for 1/7th of the total NHS waiting list

£395.8m Annual musculoskeletal spend at its peak in 2019-20[6]

£37.2m Annual primary and community musculoskeletal spend in 2020-21[7]

14,639 Number of people waiting more than **two years** (105 weeks) or more for orthopaedic treatment

12,500 Average number of referrals for orthopaedics during 2021-22



13% variation in the percentage of people waiting **two years or more** across health board areas

10% of people waiting **two years or more** in the Cardiff and Vale area

compared to

23% of people waiting **two years or more** in the Swansea Bay area

29-fold increase in the number of people waiting **over 14 weeks** for physiotherapy between March 2020 to November 2022

56% increase in total numbers waiting for orthopaedics from March 2020 to November 2022

4 Data as of November 2022 unless otherwise stated. Data is all-Wales.

5 Welsh Government data used is over 53-week data. The true 12-month position will be marginally higher.

6 The following year (2020-21) spend decreased to £308.2 million. The reduction in expenditure is a direct consequence of reduction in orthopaedic activity during the pandemic. Source: Stats Wales NHS Programme Budget for Musculoskeletal system problems (excluding Trauma)

7 Primary and community musculoskeletal spend forms part of the total annual musculoskeletal spend.

4 Recommendations

15 The box below sets out recommendations that we think are needed to strengthen the delivery of orthopaedic services. These recommendations are meant to complement those already made in the Getting It Right First Time reports and the new National Clinical Orthopaedics Strategy.

Recommendations

For the Welsh Government

R1 Actions previously taken to tackle orthopaedic performance have had a short-term focus, not delivered sustainable services, and lacked 'buy-in' from local clinical teams. The new national clinical strategy for orthopaedics sets out clinical solutions to deliver sustainable services. We recommend that the Welsh Government now needs to:

a prepare a clear national delivery plan which sets out the priority actions to be taken over the next three to five years to achieve the clinical strategy. The plan needs to include key deliverables and milestones, and clearly defined roles and responsibilities at a local and national level.

b ensure that the national delivery plan includes a clear direction for regional models to recognise the opportunities that exist to maximise available capacity and provide centres of excellence that deliver better outcomes.

c ensure that the national delivery plan encompasses the wider service input needed to deliver effective orthopaedic services. This should include but not be limited to primary and community care capacity, diagnostic capacity, capital and estates, and digital services.

d ensure that the national delivery plan is reflected in NHS planning guidance and health boards are held to account for implementation through routine performance management arrangements.

Recommendations

R2 The Getting It Right First Time reports at a national and health board level set out clearly a range of recommendations which will help drive improvements in the hospital element of the orthopaedic pathway across Wales, but many of the areas of focus are not new. We recommend that the Welsh Government needs to:

- a ensure mechanisms are in place to obtain assurance from health boards that the Getting It Right First Time recommendations are being implemented.
- b place a significant and constant focus on improving efficiencies and productivity in orthopaedics through its challenge and scrutiny of health boards. This needs to be supported by regular benchmark reporting, and an agreed set of orthopaedic procedures that have been shown to have limited clinical value.

For Health Boards

R3 The Getting It Right First Time reports set out clearly a range of recommendations which will help drive improvements in efficiencies and productivity in orthopaedics at a local level. We recommend that health boards need to:

- a ensure they maintain oversight and scrutiny of implementation of the Getting It Right First Time recommendations as part of their governance arrangements; and
- b ensure that clear action plans are in place to address the things that get in the way of improvement.

Recommendations

R4 Clinical Musculoskeletal Assessment and Triage Services (CMATS) are having a positive impact on managing demand and providing support. But services are struggling with capacity and are inconsistent in their delivery with examples of duplication of effort where First Contact Practitioners (FCPs) exist. We recommend that health boards need to:

- a ensure that local CMATS are appropriately staffed, and at a minimum, reflect previous Welsh Government guidance; and
- b ensure that where First Contact Practitioners (FCP) exist, there are clear pathways between FCPs and CMATS to reduce duplication and minimise waits.

R5 There needs to be a greater focus on outcomes across health boards and while people are deteriorating on orthopaedic waiting lists, limited progress has been made by health boards to provide ongoing support and monitor and report harms. We recommend that health boards need to:

- a ensure that Patient Reported Outcome Measures (PROMS) and Patient Reported Experience Measures (PREMS) are fully rolled out in all orthopaedic services and used to inform decision making both at a service and patient level;
- b ensure that local clinical leadership arrangements and performance information are used to identify opportunities for minimising interventions that are unlikely to result in improved outcomes; and
- c put arrangements in place to monitor people waiting, provide communication, support and advice when needed, and report openly and honestly, through their existing governance arrangements, the extent to which people are coming to harm whilst waiting for orthopaedic treatment.

What is the scale of the challenge?

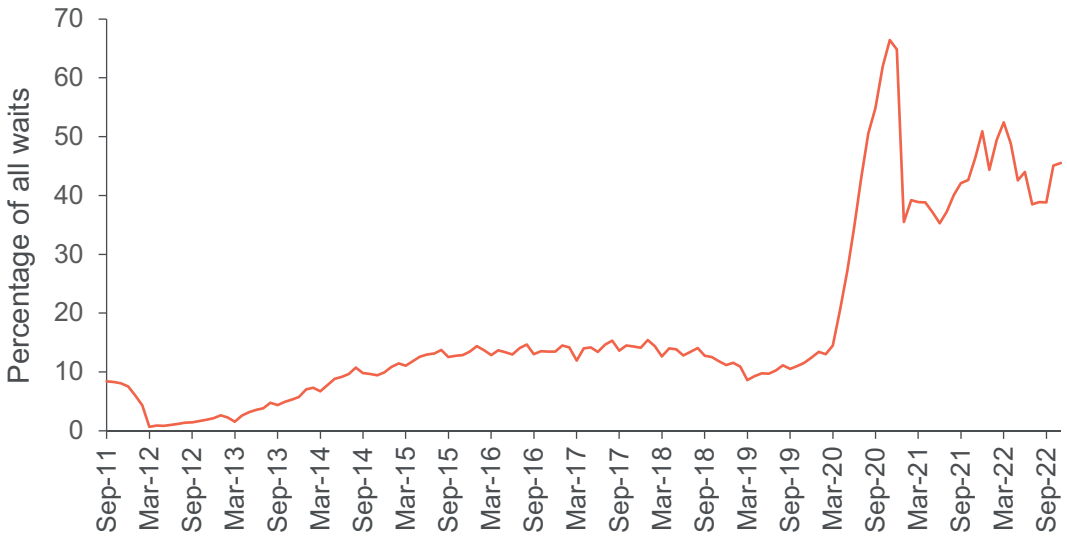
01

Orthopaedic waits have dramatically deteriorated from an already poor position prior to the pandemic

16 Orthopaedic services have not been in a position where they have been able to see and treat people within target timescales since well before the onset of the pandemic. National data show a long-term trend in deteriorating performance against waiting time targets. Since 2011, the national targets of 95% of patients waiting no more than 26 weeks from referral to treatment, and no one waiting over 36 weeks have never been met. At its best, in 2012, 88% of orthopaedic patients were waiting no more than 26 weeks, and 11% waiting over 36 weeks across Wales[8].

17 Immediately before the pandemic, in March 2020, 14% of patients were waiting over 36 weeks. But the pandemic has made a bad position worse. The latest (November 2022) data shows that for those waiting to receive orthopaedic treatment, 46% were waiting over 36 weeks (**Exhibit 2**). This position peaked at 66% in November 2020.

Exhibit 2: Percentage of patients waiting over 36 weeks for orthopaedic treatment by month across Wales, September 2011 – November 2022

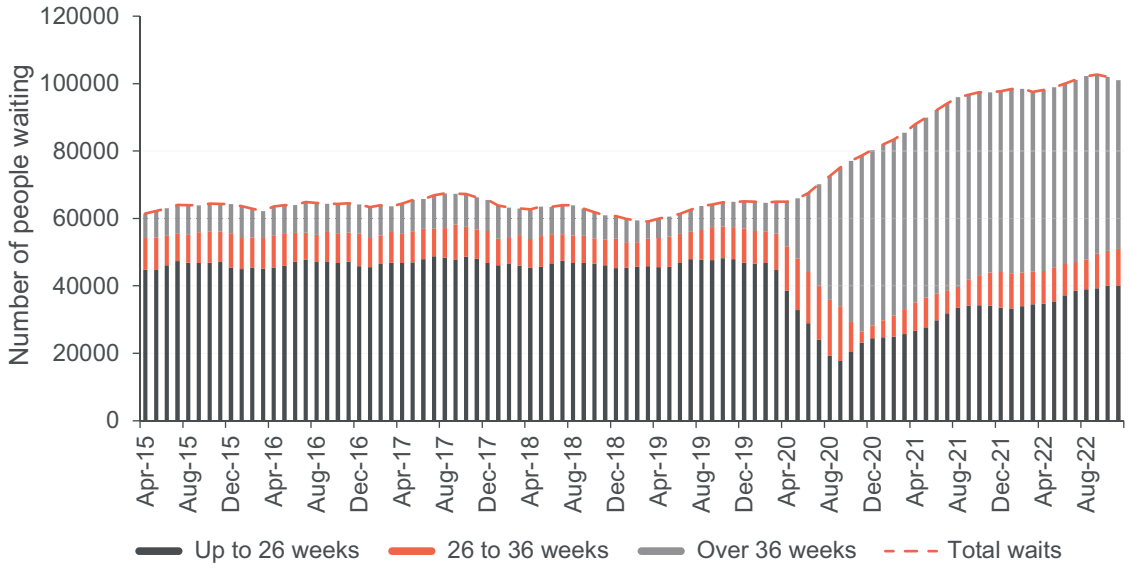


Source: Audit Wales analysis of StatsWales data

8 Data source: Stats Wales, Referral to treatment open pathway data for Trauma and Orthopaedics

18 In March 2020, there were 64,942 people on the orthopaedic waiting list. By September 2022, this had increased to 102,699 people (**Exhibit 3**). This position had slightly improved to 101,014 patients in November 2022. Of those, 50,024 (45.5%) have been waiting more than 36 weeks. More concerning is that of those waiting more than 36 weeks, 37,396 have been waiting over 12 months, and 14,639 have been waiting two years or more.

Exhibit 3: Number of patients waiting for orthopaedic treatment across Wales, April 2015 – November 2022



Source: Audit Wales analysis of StatsWales data

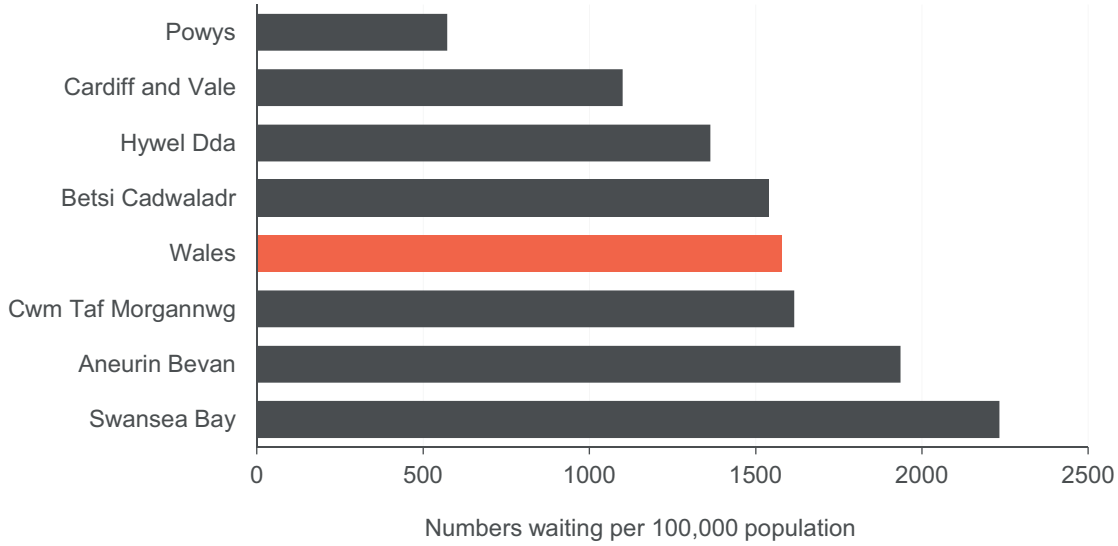
19 To give a broader perspective of the extent of the challenge, in March 2022, 1.3% of the population in England were on an orthopaedic waiting list. In Wales, 3% of the population were on an orthopaedic waiting list[9]. In November 2022 proportionately, there were more people waiting for orthopaedic treatment in Wales over 36 weeks (1.6% of the population) than there were waiting in total in England. These figures do however not take account for the health and age of the respective populations, with the Welsh population generally older and sicker than those in England.

9 Statement by the British Orthopaedic Association, on England and Wales Trauma & Orthopaedics Waiting Times Data for March 2022

The extent of the orthopaedic waiting list shows significant geographical variation across Wales

20 A comparison across health board areas of the total numbers of patients waiting over 36 weeks per 100,000 population shows some stark geographical variations (**Exhibit 4**).

Exhibit 4: Number of patients waiting over 36 weeks for orthopaedic treatment per 100,000 population, by Health Board of residence (November 2022)



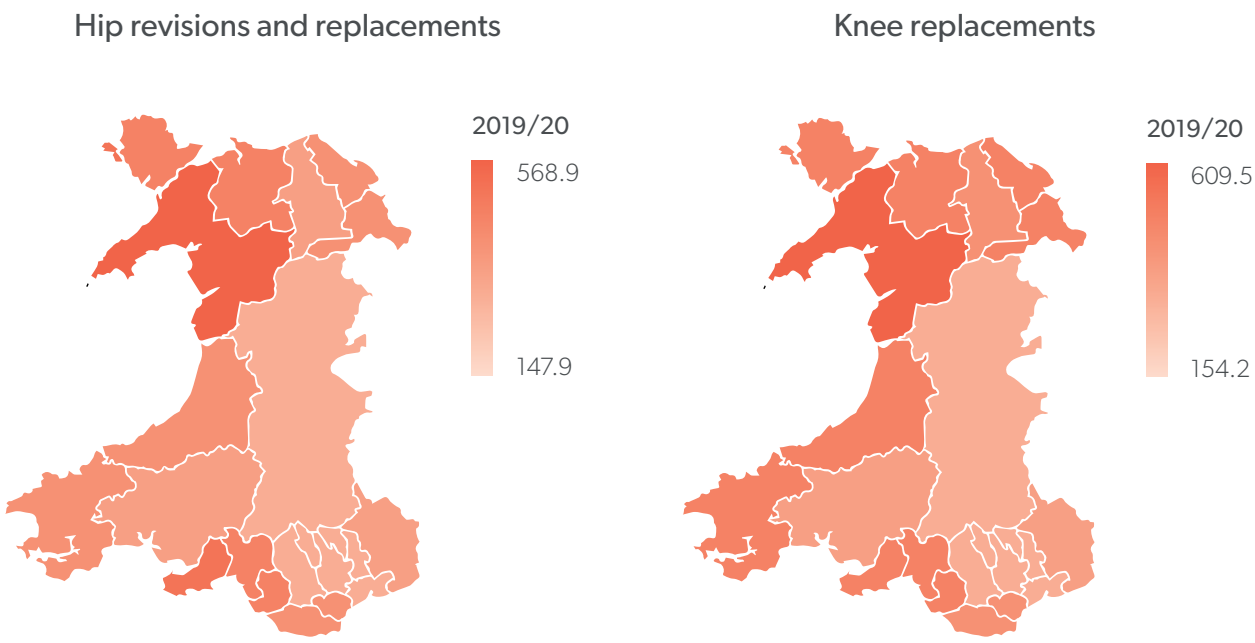
Source: Audit Wales analysis of StatsWales data

21 This geographical variation is equally as noticeable when considering specific orthopaedic procedures such as hip or knee replacement surgery. **Exhibit 5** shows average waits in Wales for hip replacement in 2019-20[10] varied from around 148 days for Powys residents[11] to almost 567 days for Gwynedd residents. A similar, though slightly worse position is observed for patients receiving knee replacement procedures with waits varying from 154 days for Powys residents to almost 610 days for Isle of Anglesey residents in 2019-20.

10 2020-21 procedure level wait data is currently incomplete. We have therefore used the most recent pre-pandemic dataset.

11 Note that some Powys residents will receive treatment from English providers where waiting times are shorter than in Wales.

Exhibit 5: Mean waiting times in days for hip revisions and replacements, and knee replacements for 2019-20, by local authority area



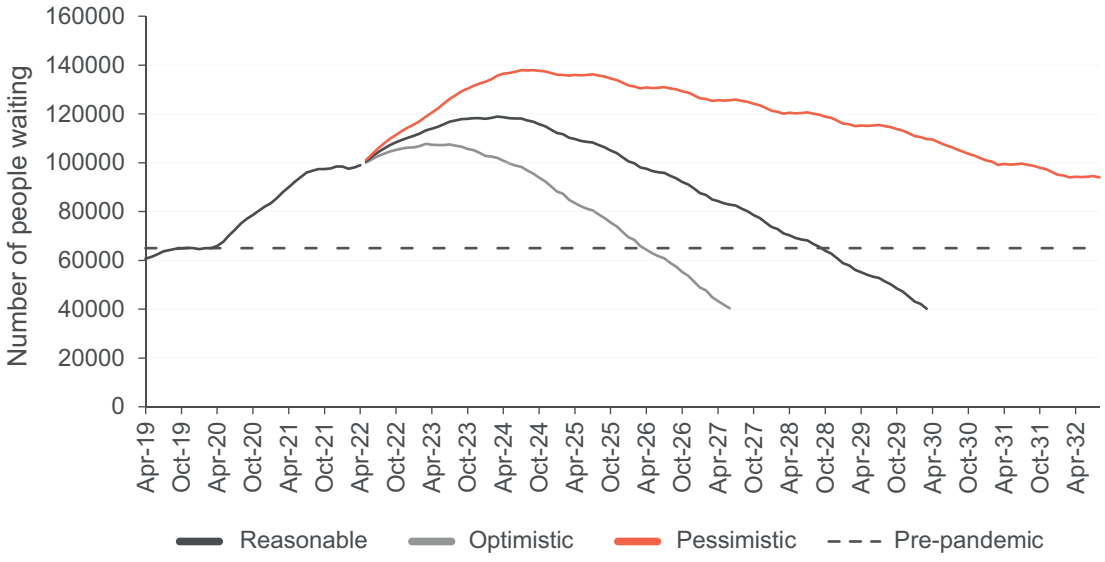
Source: Health Maps Wales, Common Procedure dataset

22 Health Boards are using all possible means to try to reduce the waiting lists. This includes outsourcing, where Health Boards are seeking third-party organisations to provide services on their behalf, such as private healthcare providers or NHS Trusts in England. Outsourcing provides a short-term solution, but this potentially could further widen inequalities of access to care. People living in deprived communities may not be able to travel further to receive their care and those with complex comorbidities may require their procedure in a hospital with intensive care facilities. This may mean those groups of patients face potentially longer waits for their treatment.

Without significant intervention, orthopaedic waits may never return to pre-pandemic levels

23 We have used national data to work out how long it could take NHS Wales to get orthopaedic waiting lists back to March 2020 levels[12]. We developed three illustrative scenarios: **reasonable**, **pessimistic**, and **optimistic**. The modelling (**Exhibit 6**) for our optimistic scenario suggests that the orthopaedic waiting list could peak in 2023 but return to pre-pandemic levels by 2026. The reasonable model would see waiting lists return to pre-pandemic levels by 2028, noting that pre-pandemic performance was itself not meeting Welsh Government targets. The pessimistic scenario may never see a return to pre-pandemic waiting list levels.

Exhibit 6: Illustrative scenarios of waiting list numbers for orthopaedic services across Wales



Source: Audit Wales analysis of StatsWales data

12 **Appendix 1** sets out how we modelled the scenarios.

24 The key variables in our modelling cover the rate at which patients are added to the orthopaedic waiting list over time, the rate at which patients are removed from the list, the potential growth in demand, and the extent to which potentially 'missing' referrals or latent demand returns (discussed later in this report). Our optimistic modelling is also based on assumptions around increasing current activity through increased capacity by 25% by 2025 and reducing the referral demand through prevention and early treatment (such as increased use of CMATS). Our modelling does not consider possible new or more complex demand because of changes in population health.

Long waits for treatment are affecting many people's physical and mental health

25 While orthopaedic and musculoskeletal problems are not, in themselves, life threatening, they can be debilitating and can significantly affect people's quality of life. Many patients waiting for treatment will be experiencing discomfort and pain daily which can lead to a loss in mobility and independence, which in turn can cause wider deterioration in physical and mental health. For some patients this can impact on their ability to work and for many patients there will be an increased need for ongoing support from GPs to help manage their condition. Prolonged waits for joint related problems can also result in further deterioration which could make the required surgery more problematic and potentially less effective.

26 In its submission to the Senedd's Health and Social Care Committee inquiry into the impact of the waiting list backlogs on people in Wales, the Board of Community Health Council's (CHCs)[13] highlighted that orthopaedic services were one of the most common services that the local CHCs were hearing about. In a report by the Swansea Bay Community Health Council on the lived experiences of people waiting for elective orthopaedic surgery, 92% of patients reported a deterioration in their condition. Nearly three-quarters agreed the length of time they had been waiting for surgery had affected their mental health and wellbeing.

13 Inquiry into the impact of the waiting times backlog on people who are waiting for diagnosis or treatment in Wales: Board of Community Health Councils

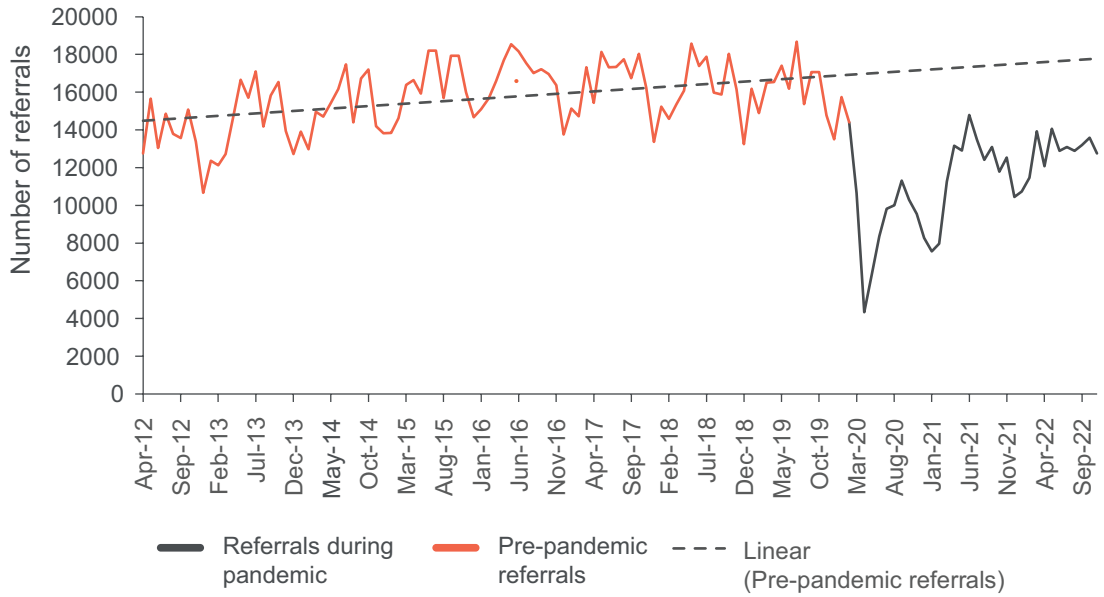
What is impacting the recovery of orthopaedic services?

02

Referral rates are not yet back to pre-pandemic levels

27 The change in the pattern of orthopaedic referrals during the pandemic is like that experienced across planned care services more generally, with a sharp decline in referrals at the onset of the pandemic[14] (**Exhibit 7**). Referrals have not yet returned to pre-pandemic levels. When comparing the level of referrals between March 2020 and March 2022, against 2019-20 referral levels, around 135,000 referrals are 'potentially missing'.

Exhibit 7: Number of orthopaedic referrals across Wales, April 2012 – November 2022



Source: Audit Wales analysis of StatsWales data

28 NHS Wales is currently benefitting from rates of orthopaedic referrals continuing to be lower than pre-pandemic levels. The waiting list position would otherwise be substantially worse. Some of the missing referrals or latent demand may never appear due to, for example, people choosing to seek private treatment, but it is expected that a proportion of the unmet demand will appear and further exacerbate the challenges being faced by orthopaedic services.

14 Note that referral patterns vary significantly by Health Board.

Although radiology and physiotherapy services are recovering, increased demand is adding to delays in orthopaedic pathways

29 Timeliness of orthopaedic treatment is dependent on the timeliness of each stage of the orthopaedic pathway[15] which will include other services such as radiology services and physiotherapy. Since the beginning of the pandemic, the total number of patients across Wales waiting for a consultant referred radiology test increased from 23,979 in March 2020 to 33,121 in November 2022. The total number of people across Wales waiting for a GP referred radiology test increased from 18,703 in March 2020 to 30,175 in November 2022.

30 Of particular interest to orthopaedic services are waits for diagnostic magnetic resonance imaging (MRI) and ultrasound scans. While the number of people waiting has increased, positively the number of people waiting less than the target wait of eight weeks is now at, or marginally better, than levels experienced pre-pandemic, suggesting good progress had been made to recover services. The number and proportion of people waiting over 14 weeks however has grown substantially across both diagnostic tests due to the increased demand (**Exhibit 8**).

15 A pathway is an agreed common approach for a course of care. For orthopaedic patients, this would typically include some or all the following: GP referral, first outpatient appointment, diagnostic test and/or therapy intervention, preoperative assessment, MRSA and COVID-19 screening, consenting, surgery and follow-up outpatient appointment.

Exhibit 8: Number and proportion of patients waiting over 14 weeks for diagnostic tests across Wales in March 2020 and November 2022

	March 2020		November 2022	
	Number	%	Number	%
MRI – Consultant referred	34	3.6%	1,344	10.4%
MRI – GP referred	1	0.04%	478	14.6%
Ultrasound Scan – Consultant referred	55	0.7%	2,361	19.5%
Ultrasound Scan – GP referred	18	0.1%	6,611	26.7%

Source: Audit Wales analysis of StatsWales data

31 Access to physiotherapy presents a similar but more concerning picture. The number of adults waiting for physiotherapy increased from 16,253 in March 2020 to over 32,269 in November 2022. Although more patients are now being seen by a physiotherapist within eight weeks compared to pre-pandemic levels, the number of patients waiting over 14 weeks for physiotherapy has increased 29-fold from 148 in March 2020 to 4,202 in November 2022. Numbers waiting however are gradually reducing. Long therapy waits will not only have an impact on the timeliness of orthopaedic pathways but can also undermine preventative efforts to reduce people's need for surgery.

Capacity and efficiency were already problematic prior to the pandemic, and a slow restart of orthopaedic services has exacerbated the backlog

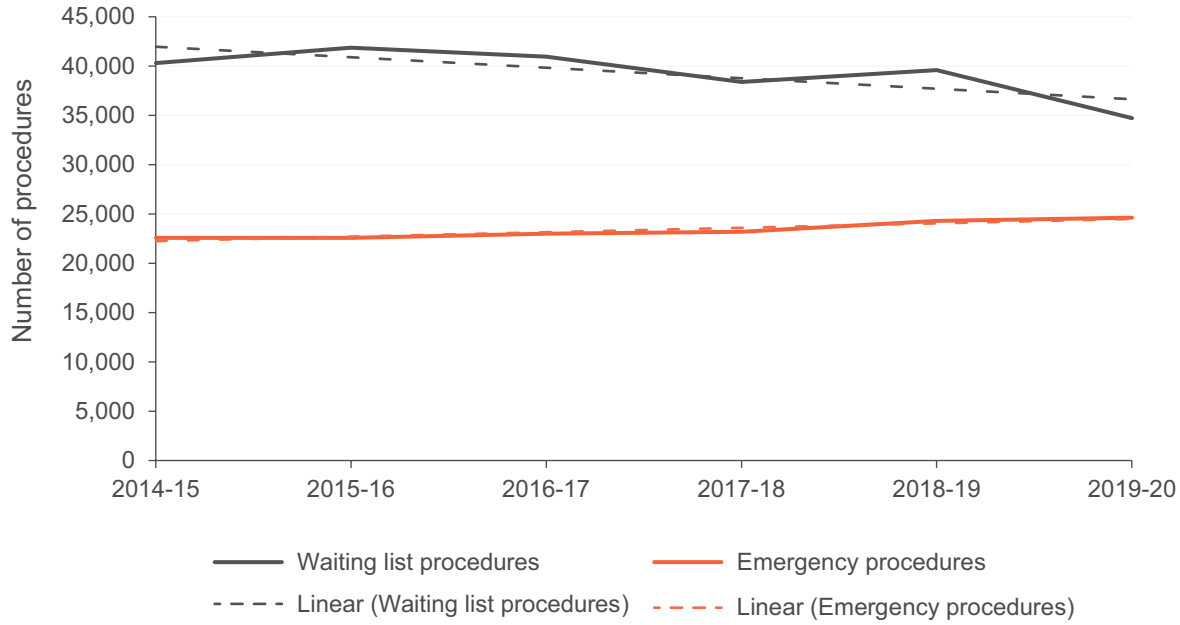
32 For several years there has been insufficient NHS orthopaedic capacity to meet demand. Prior to the pandemic, NHS Wales typically commissioned around 45,000 procedures for the Welsh population, with around 40,000 procedures provided though 'core' activity and waiting list initiatives[16]. The remainder was commissioned from other non-NHS Wales providers[17]. Outsourcing and waiting list initiatives have been short-term measures to improve waiting lists and provide capacity but had done nothing to ensure the sustainability of orthopaedic services.

16 Waiting list initiatives are used by NHS bodies to tackle waiting lists and meet national targets. They involve a short-term increase in capacity such as extra clinics at nights and at weekends, and the use of private healthcare provision.

17 Audit Wales analysis of Patient Episode Data Wales orthopaedic waiting list procedure data, NHS Wales provider versus total commissioned.

33 Over the six years leading up to the onset of the pandemic, the deployment of trauma and orthopaedic capacity changed. National data shows a 10% increase in emergency trauma activity between 2014-15 and 2019-20 which has placed pressure on capacity for planned care. For the same period, there was a 14% decrease in orthopaedic waiting list activity[18] (**Exhibit 9**). The shift between orthopaedic waiting list activity to trauma may not have been readily noticed over such a long period of time but will have had an impact on the capacity to tackle the already existing waiting list backlog. Changes to pension rules for NHS consultants have also impacted on waiting list activity due to a reduction in the willingness of consultants to take on waiting list initiatives.

Exhibit 9: Trend in emergency trauma and orthopaedic waiting list activity, based on the number of procedures, 2014-15 and 2019-20



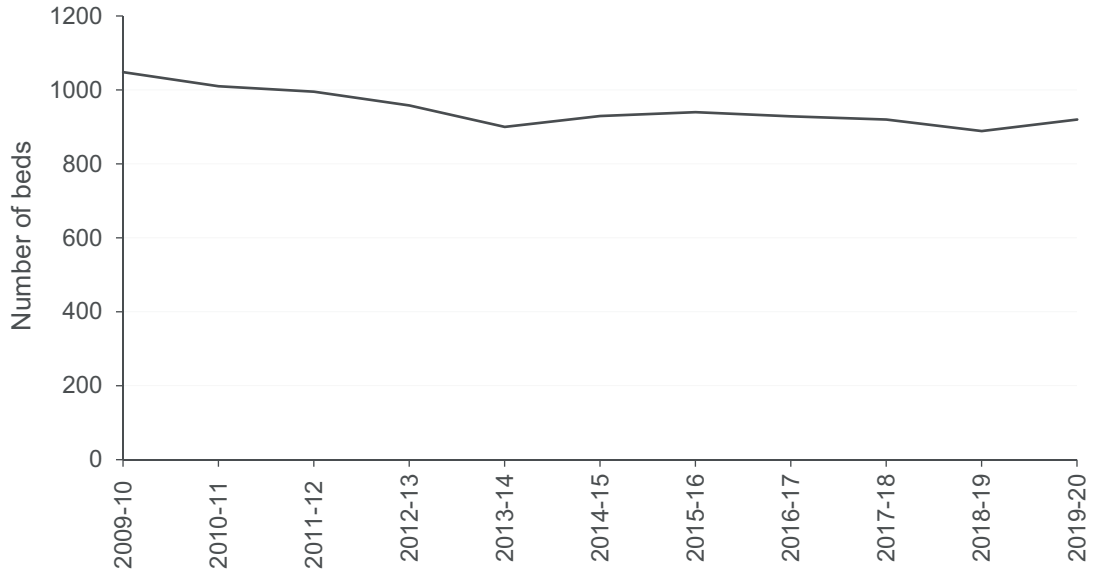
Source: Audit Wales analysis of Patient Episode Database for Wales

34 Capacity constraints also occurred because of a reduction of beds and wider urgent and emergency care pressures resulting in cancellations of orthopaedic activity. **Exhibit 10** shows the total number of orthopaedic beds declined by 12% from 1,048 in 2009-10 to 920 in 2019-20[19].

18 The numbers of waiting list procedures reduced disproportionately in 2019-20. We have assumed this is because of the onset of the pandemic.

19 2020-21 Bed data cannot be compared to previous years because it is based on a different source, definitions, and hospital types.

Exhibit 10: Trend in number of trauma and orthopaedic beds, 2009-10 to 2019-20



Source: Audit Wales analysis of StatsWales data

35 Bed capacity has also further reduced over the last two years with the continual need for health boards to respond to COVID-19 cases and retain infection control measures.

36 Orthopaedic services can operate models with fewer beds if the surgical element of the pathway is well planned, patients are prepared and educated, and processes enable effective and timely discharge. Enhanced recovery approaches also help to reduce length of stay. However, our data analysis indicates lengths of stay have not reduced for many years. Average combined trauma and orthopaedic lengths of stay have stayed at around seven days between 2014-15 and 2019-20[20], with substantial variability in lengths of stay by health board. Our data analysis also indicates around a 25% reduction in day case activity between 2014-15 and 2019-20.

20 Audit Wales analysis of Patient Episode Database for Wales

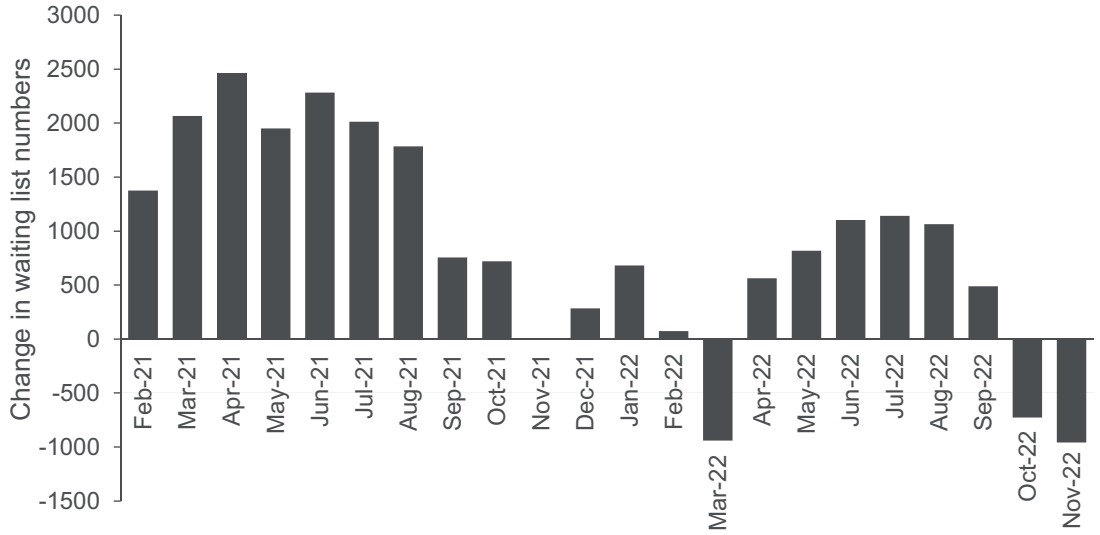
37 Orthopaedic services have been slow to restart since the lessening in the impact of the pandemic in 2021 and since the last major (omicron) COVID-19 wave in early 2022. Services are currently still far off the levels of activity seen prior to the pandemic. Current inpatient and day case orthopaedic activity across Wales is around 60% of pre-pandemic levels[21]. Most health boards are also only achieving around 20% to 30% of their orthopaedic procedures as day cases. NHS Wales is targeting around 60% in future. Day case (and very short stay) provides a significant opportunity for utilising existing capacity better.

38 Based on changes to waiting lists on a month-by-month basis, orthopaedic capacity is currently not meeting demand, resulting in monthly increases in the number of patients waiting (**Exhibit 11**). In 2021-22, the Welsh Government provided extra funding to health boards to buy additional short and medium-term capacity to support the recovery of planned care services, including orthopaedics. Historically NHS Wales would have looked to NHS England for additional capacity, but they too are struggling to recover their own waiting lists. Consequently, requests for additional capacity through private providers have been greater than the supply available and the ability of health boards to secure the additional capacity needed has been limited. This is particularly the case for orthopaedics. Some medium-term additional capacity has been secured using temporary expansions to health boards' existing clinical estate, such as using demountable units to create operating theatres.

39 Funding has also supported administrative and clinical validation of waiting lists to ensure that only those who need treatment are waiting. However, these have tended to be undertaken as one-off exercises to cleanse waiting lists at year end, resulting in a temporary reduction in waiting lists in March. Funding to support the ongoing recovery of planned care has continued and will be available to health bodies for a further three years.

21 Audit Wales analysis of Welsh Government, unvalidated orthopaedic statistics

Exhibit 11: Month-by-month change in waiting lists numbers across Wales, February 2021 – November 2022



Source: Audit Wales analysis of StatsWales data

Orthopaedic services have not kept up with demand and previous national funding initiatives have failed to secure sustainable service improvements

40 Basic analysis of trend data indicates that demand for orthopaedic services is growing. Furthermore, forecasts by the Office of National Statistics indicate a 27% growth of over 75-year-olds (from around 307,000 to 390,000) living in Wales between 2020 and 2032. While positive, this will likely drive further growth in demand for orthopaedic services as more people will be living with age-related orthopaedic and musculoskeletal conditions. This additional demand needs to be planned for and funded.

41 Given that orthopaedic waiting lists pre-COVID-19 were deteriorating, it is unrealistic to think that without significant changes, current capacity will ever result in sustainable service recovery. Indeed our 'optimistic' scenario modelling (**Exhibit 6**) is based on a gradual increase of commissioned orthopaedic capacity (whether provided by NHS Wales or externally commissioned) and/or productivity levels to 5% above pre-pandemic levels noting that services are currently only running at about 80% of pre-pandemic levels. Our model also assumes that services can curtail any growing demand.

42 There has been a history of short-term funded national initiatives for orthopaedic services in Wales. In June 2001, the then Minister for Health and Social Services announced a £12 million package to reduce orthopaedic waits to 36 weeks. Much of this was non-recurrent and consequently had limited ongoing impact. In 2005, the Welsh Government launched its orthopaedic plan for Wales. This initially brought down waits but again did not result in sustainable service improvements. In 2011, the national orthopaedic programme began its aim to eliminate over-36-week waits. At the same time, the then Minister for Health and Social Services announced £65 million over three years to make orthopaedics best in class. Our 2015 report[22] considered the £65 million investment. We reported that orthopaedic services have become more efficient in the past decade, but NHS Wales was not well placed to meet future demand. Whilst there had been a focus on securing immediate reductions in waiting times, less attention had been paid to developing more sustainable, long-term solutions to meet demand. Since then, NHS Wales has struggled to meet its orthopaedic waiting list targets.

43 Planning for elective orthopaedic services needs to have a clear focus on the short, medium, and longer term, and be supported by realistic assessments of capacity and demand. The short-term focus must be on speeding up recovery of services and addressing existing inefficiencies in the system, the medium-term on building sustainable service models which will start to tackle the backlog; whilst the longer- term view needs to take account of population demographics in forecasting future demand on services, and what is needed to meet that demand.

44 While NHS Wales needs to focus on getting services back up and running to meet the demands being placed on them, there is also a duty on health boards to be maintaining a focus on keeping people safe while they are waiting for treatment. Lack of communication from health boards whilst waiting was identified as an issue in the CHC reports. Very few health boards have put arrangements in place to monitor patients on waiting lists and provide the contact needed to reassure patients and provide advice and support as necessary.

22 Audit Wales Review of Orthopaedic Services, 2015

What action is being taken?

03

Community-based prevention and treatment are having a positive impact on reducing demand, but capacity is an issue

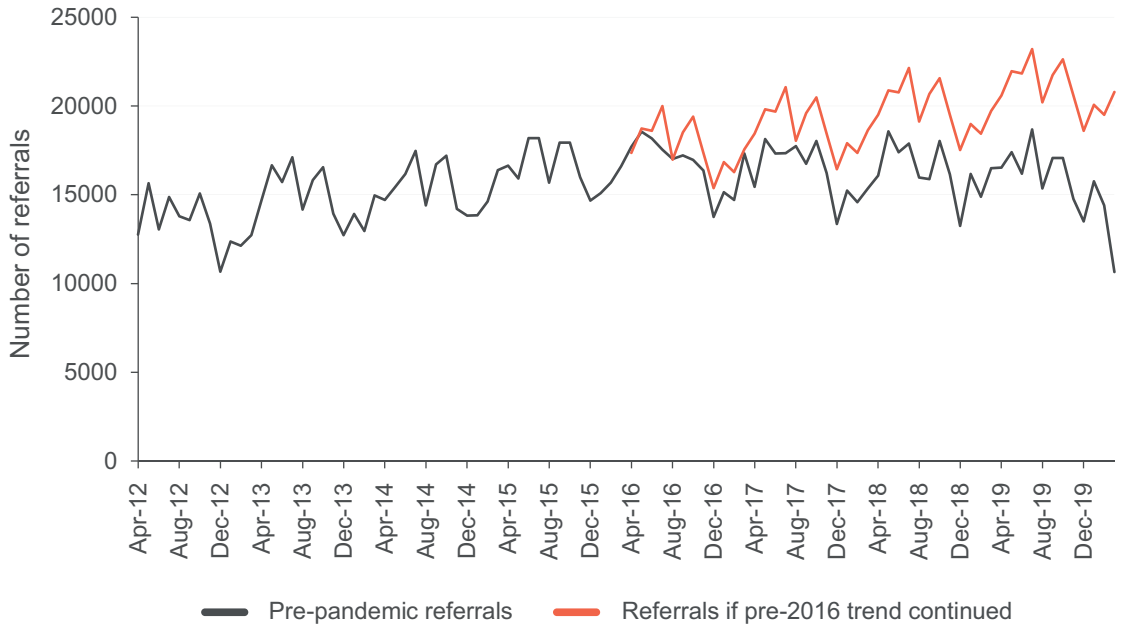
45 For several years, the Welsh Orthopaedic Board has helped to influence developments in orthopaedic services. The Board has overseen the rolling out of preventative approaches such as Community Musculoskeletal Assessment and Treatment Services (CMATS)[23], and more recently First Contact Practitioners (FCPs)[24]. While community-based musculoskeletal services began far earlier in some health boards, for most they started to be rolled out more comprehensively from 2016.

46 While it is difficult to attribute cause and effect directly to the achievements of the community-based prevention, national data suggests that efforts between 2016 and 2020 helped stem the growth in referrals. **Exhibit 12** shows referral trends, and a change in the referral trajectory had community-based prevention not been in place. We have applied a forecast trendline to highlight how the referrals may have increased if the pattern of demand seen between 2012-2016 continued into 2016-2020. With an aging population over this time, we would have expected to see a continued growth in referrals. But this has not been the case.

23 CMATS were developed to provide a community-based service for the assessment and treatment of musculoskeletal-related pain and conditions.

24 First contact practitioner is a new model evolving across the UK which involves placing physiotherapists directly into GP practices to see and treat patients who come into the practice with musculoskeletal problems.

Exhibit 12: Actual orthopaedic referrals compared with predicted referrals from 2016 onwards had community-based schemes not been in place, April 2012- December 2019



Source: Audit Wales analysis of StatsWales data

47 But capacity for CMATS has been an issue. Although waits for CMATS are not included as part of the standard waiting times, our recent work on orthopaedic services identified that CMATS waits could be up to four months. All referrals for orthopaedic services are made via CMATS, and only at the point in which is it considered that CMATS intervention is not appropriate, are referrals passed on to orthopaedic services. For many patients, this will be at the point the referral is triaged by the CMATS which can typically take up to a week. But for some, onward referral to orthopaedic services may not happen until they have waited and been seen by the CMATS.

48 Our recent work also identified inconsistencies in the CMATS model across Wales, with differences in the range of multidisciplinary professionals that make up the team, and differences in the ability for CMATS to refer directly for diagnostic tests. We also found potential duplication of effort between CMATS which include physiotherapists and FCPs and a risk that overall waits for treatment are elongated because of the need to access both FCPs and CMATS before onward referral to orthopaedic services.

49 One scheme to support people is the National Exercise Referral Scheme (NERS). Funded by the Welsh Government and run by the 22 local authorities, the scheme provides opportunities for people with long term conditions to make and maintain healthier lifestyle choices. This is provided through physical activity and behaviour change with the aim to improve health and wellbeing. One intervention is focused on low back pain[25], with another focused on weight management. Although numbers are small, the shift to virtual working in response to the pandemic has provided an opportunity to increase capacity and support people on waiting lists. In its latest report[26], over 25,000 participants attended one of the virtual, outdoor, or indoor activities put in place to support the wider NERS programme. However, due to the pandemic, the NERS was unable to take new referrals. This has now been changed, but services are heavily reliant on the short-term funding available from the Welsh Government and the support of local authority facilities such as leisure centres to run activities.

There is a clear commitment to improve and transform orthopaedic services nationally, although this may take time to achieve

50 Service efficiency, clinical productivity and effectiveness of hospital based orthopaedic services has been an aim in Wales for a long time. NHS Wales has developed clinical pathways based on best practice. But in the past, these clinical pathways have not always been well implemented and there continues to be variation in approaches across health boards.

25 NERS Low Back Pain Intervention
26 All Wales NERS Infographic Quarter Two, 2021-22

51 More recently NHS Wales has commissioned the Getting It Right First Time (GIRFT) team to review acute orthopaedic services. The reviews started in early 2022 and covered all seven health boards and 21 hospital sites that provide orthopaedic services in Wales, comparing clinical practice with England. Recommendations to health boards focussed on:

- strengthening leadership, through health board specific orthopaedic steering groups;
- reducing unwarranted and inappropriate variation in clinical practice, performance, and efficiency;
- engaging staff in change and improvements to orthopaedics and understanding the drivers that are affecting morale;
- implementing waiting list recovery at pace;
- better arrangements to support patients prior to admission, and better discharge planning;
- improving the consistency of collection and use of patient reported outcome measures;
- improving surgical site infection data recording and reducing deep infection rates to 0.5% or lower;
- creating short, medium, and long-term multi-disciplinary workforce plans; and
- building elective orthopaedic recovery plans, including capacity and demand planning on a health board and broader regional footing, multi-disciplinary workforce planning, ring-fencing elective capacity and boosting short-term theatre capacity.

52 The GIRFT team's national report to the Welsh Government includes 28 recommendations spanning but not limited to leadership, safety, workforce, efficiency and clinical practice. The recommendations from both the national and local reports need implementing swiftly and effectively.

53 At the same time as the GIRFT work, the Welsh Government, through the Welsh Orthopaedic Board, commissioned the Welsh Orthopaedic Society to prepare a clinical strategy for Wales. This strategy provides a thorough and honest appraisal of the current position of orthopaedic services. It sets out the need for new leadership through a Welsh Orthopaedic Network and a requirement for the development of orthopaedic hub sites to better protect waiting list activity from unscheduled care pressures, and to enable efficient high volume low complexity centres of excellence.

54 Regional treatment centre hubs offer a good solution to provide protected orthopaedic capacity and deliver best in class levels of efficiency in the medium and longer term. But these will take time, investment, and cooperation across health boards to implement. As an immediate action, some health boards are creating additional operating theatre capacity in the short term, as mentioned in **paragraph 38**.

What else needs to be done?

04

Several challenges need to be addressed if services are not just going to tackle the orthopaedic backlog, but be sustainable for the future

55 This report sets out the huge scale of challenge that is faced in Wales. The extent of the numbers of patients waiting, limited capacity available and potential for further growth in demand provide a concerning landscape not just in the short term but also the medium term. All that can be done must be done within the current operating environment, but there remain several risks to longer-term improvement.

56 From our discussions, the Welsh Government and NHS Wales recognise the scale of the challenge, but lessons must be learnt from previous initiatives. The national strategy developed by the Welsh Orthopaedics Board must be accompanied by buy-in from local clinical teams to ensure that changes are embedded and sustained.

57 A renewed focus on driving efficiencies is needed to maximise already stretched resources but this cannot be done in isolation. A whole system focus is needed to ensure that other services that support the orthopaedic pathway are also working effectively. New technology and improved estate need to be prioritised and regional solutions need to be much more at the core of delivery plans.

58 In the context of many patients having to wait a very long time for their treatment, information on experience and outcomes also needs to be at the heart of decision making.

59 These key actions are explored further in the exhibit below.

Exhibit 13: Key actions for NHS Wales to tackle the challenges in orthopaedic services

Lessons must be learnt from previous initiatives which have failed to secure service transformation 	Together the new clinical strategy and the GIRFT reports provide the most comprehensive assessment on the position of orthopaedic services in Wales. It is positive that the Welsh Government and NHS Wales are recognising the scale of the challenge. But the response to these cannot be the same as we have seen in response to previous orthopaedics plans; fundamental embedded change is needed.
National plans must be accompanied by buy-in from local clinical teams 	Our recent work in orthopaedics, whilst recognising good intent from the Welsh Orthopaedics Board to improve and transform services, highlighted the variability in which that intent translated into practice across health boards. Where national directives to implement service changes have been set in the past, implementation has often been slow, inconsistent, and without the 'buy-in' of local clinical teams. The strategy needs to be underpinned by clear and defined programmes of activity and bold leadership will be needed at all levels to ensure that the new clinical strategy delivers a consistent service across Wales.

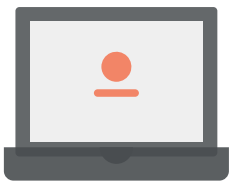
A renewed focus on efficiencies is needed

The GIRFT reports have a clear focus on improving efficiency and productivity in orthopaedics, and ultimately delivering better outcomes for the people of Wales. But this focus is not new. NHS Wales has been focusing on reducing length of stay, improving theatre productivity, reducing follow-up rates, and minimising cancellations for some time, but inefficiencies still exist. There needs to be a significant and constant focus in this area. Regular benchmarking reporting needs to be in place to enable challenge and scrutiny to happen locally and nationally, supported by clear action plans to address the things that get in the way of improvement.

A whole system and wider patient pathway focus is needed

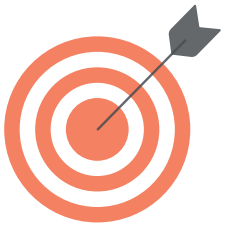
The GIRFT reports and clinical strategy quite rightly focus on orthopaedic services, but effective delivery is reliant on wider services across the NHS. Capacity of enabling clinical services such as diagnostics and therapies to support timely diagnosis, prevention and treatment in the community and effective discharge needs to be available.

Investment in new technologies and improved estate needs to be prioritised



Digital solutions offer further opportunities for efficiencies but need to be effectively piloted and evaluated to ensure wider investment delivers value. Capital and revenue investment needs to be carefully prioritised to get most impact, considering where opportunities exist to make better use of digital initiatives and estate development.

Regional solutions to meet current and future demand need to be pursued with much more rigour



Developing regional service models has been notoriously difficult in the past but regional working provides opportunity to maximise available capacity and provide centres of excellence that deliver better outcomes. Some health boards are starting to work together to look at regional solutions, but these are limited and often as a reactive response to short-term capacity issues. Regional models need to be at the core of orthopaedic delivery plans, and not around the margins with small scale low impact initiatives, which has been the case previously.

Information on patient experience and outcomes must be used extensively to shape clinical decisions and advice to patients

A greater focus needs to be given to patient experience and outcomes. The roll out of Patient Reported Outcome Measures (PROMS) and Patient Reported Experience Measures (PREMS) for orthopaedic services is still variable across Wales. These have been an ambition for a long time but are not well used to inform future investment and more importantly dis-investment and value-based decisions. At a patient level, outcomes should inform choice and 'what matters' discussions. More also needs to be done to support consistent clinical decision making. For example, establishing a common list of procedures not normally undertaken and setting criteria such as BMI thresholds, if surgery for some patient groups would not result in positive outcomes. Our earlier audit work found health boards were working to different lists of procedures considered ineffective.

Appendices

1 Our approach

Our approach

The evidence base for our work comes from reviews of documents on orthopaedic and musculoskeletal services, data analysis, observation of the Welsh Orthopaedic Board and more recently the Orthopaedic Summit in August 2022, and interviews with Welsh Government and NHS officials. We also build on evidence captured prior to the pandemic from health boards.

Our data analysis is based on Welsh Government data on StatsWales, Health Maps Wales, Patient Episode Dataset Wales, and bespoke data requests to NHS officials.

Our scenario modelling in **Exhibit 6** draws on some initial modelling work carried out by the NHS Delivery Unit. The calculation we used, following the work of the Delivery Unit, was:

- removals are calculated by taking the number of patients waiting over four weeks (ie they are not new patients that month) and subtracting that from the total waiting list in the previous month. This gives a proxy for the numbers of patients removed from one month to the next.
- additions are the people reported in the monthly figures who have been waiting less than four weeks – indicating they have been added to the waiting list in the last month. Whilst monthly additions give a reasonable measure of additions, some of those included may have already been waiting but had their 'clock' reset for some reason, for example not turning up for multiple appointments. It is also possible that some people may not be counted if they were added and removed before the data was captured at the end of each month.

Our modelling provides scenarios for the length of time it could take NHS Wales to bring orthopaedic waiting lists back to March 2020 levels using three scenarios: reasonable, pessimistic, and optimistic (**Exhibit 6**). We accounted for the possible pent-up demand (see **paragraph 26**) by evenly spreading differing proportions of the potential missing 135,000 referrals over 2022 to 2024. Those proportions varied depending on a reasonable, pessimistic, or optimistic scenario, with the optimistic scenario assuming that no pent-up demand returns. **Exhibit 14** sets out our modelling assumptions.

Exhibit 14: Waiting list modelling assumptions

Assumptions	Reasonable	Pessimistic	Optimistic
Additions 2022-2025 compared to 2019-20	87.5%	90.0%	85.0%
Annual increase in additions 2025 onwards	-0.1%	0.0%	-0.2%
Latent 'missing' referral demand presenting	5.0%	10.0%	0.0%
Activity/removals compared to 2019-20 levels during:			
2022-23	80.0%	80.0%	80.0%
2023-24	90.0%	85.0%	95.0%
2024-25	100.0%	95.0%	105.0%
2025 onwards	102.5%	100.0%	105.0%

Source: Audit Wales

Our analysis highlights the scale of the possible challenge and the length of time it could take to clear the backlog of people waiting for treatment. The scenarios we have presented in the report are based on assumptions which may alter over the coming years.

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