Department of Health
An Roinn Sláinte
Männystrie O Poustie
www.health-ni.gov.uk

Scoping the current provision of Orthotic Services in Health and Social care in Northern Ireland October 2021

Burbidge, Peter
AHP LEAD - DOH

Contents

Addendum December 2023

This document was written in 2021. In 2023 a new orthotist contract was tendered for. The new contract was awarded to Blatchfords and Opcare. Blatchfords and Opcare are two of the largest prosthetist and orthotist companies in the UK, along with a third company Steeper they employ 57% of the orthotists working for private companies (BAPO 2023). This resulted in a change to the suppliers in Northern Ireland with SG Bulls losing the contract for the Belfast Health and Social Care Trust, Western Health and Social Care Trust, South Eastern Health and Social Care Trust and Southern Health and Social Care Trust. Opcare retained the contract for the Northern Health and Social Care Trust. The existing staff will be tupe'd across to the new suppliers but the full impact of the change in suppliers is yet to be seen.

In 2023 the British Association of Prosthetists and Orthotists (BAPO) in collaboration with Staffordshire university published a comprehensive profiling of the UK Prosthetist and Orthotist (P&O) workforce. It would be remiss not to highlight the key findings from this report within this service review as they are relevant to many of the workforce challenges facing the orthotist service in Northern Ireland.

Almost a fifth of the current orthotist workforce who responded to the BAPO survey reported that they definitely, or probably do not intend to remain in the UK P&O workforce for the next 5 years. An alarming 12.5% of the qualified P&O workforce leave the HCPC register within the first 4 years of qualifying (HCPC). It is beyond the scope of this paper to investigate the reasons for this, but orthotists in Northern Ireland highlighted a number of challenges that they face, including a lack of peer support, an increasingly complex caseload and a lack of advanced clinical practice. All of these could be contributing factors for a newly qualified orthotist to leave the profession.

The report highlighted the issues with advanced practice that can result from having orthotists working outside of the ‘Agenda for Change’ structure. The Northern Ireland Advanced Practice Framework for AHPs highlights the three areas that AHPs can develop their careers in and deliver advanced practice. These are:

- Clinical
- Education
- Management/ Public health/ Leadership.

Without the structures in place to support these career progressions there is little opportunity for the orthotists to progress their career and little opportunity to develop their skills beyond their clinical roles. Subsequently few orthotists in Northern Ireland have skills in research, management or leadership, all of which are required to fulfil the HCPCs standards of proficiency and also more importantly to adequately meet the demands for the service in Northern Ireland. The BAPO workforce report (2023) suggested that the workforce strongly associated advanced practice with competency in delivering complex orthotic devices as opposed to a broader concept of practicing at a higher level across all of the pillars of practice.

Section 1: Executive Summary

In 1975 the Working Party for Prosthetics and orthotics services published a report that highlighted that the orthotics service in Northern Ireland was unnecessarily complex and fragmented, with orthotists having little autonomy in the running of their service. Over 45 years later many of the challenges facing the service today were the same ones faced back in 1975.

From the extensive review of services conducted it has become apparent that the orthotist service is staffed by an extremely professional, dedicated and highly skilled group of orthotists who clearly want the best outcomes for their patients. However, the current system has unnecessary complexities that limits the orthotists autonomy and reduces their ability to utilise all of their skills and practice effectively at the top of their license.

Across the region there are some good models of practice evidenced. In some there has been excellent joint work between the orthotists and Trusts with orthotists involved in multi-disciplinary teams (MDT) clinics and implementing service developments. However, in other Trusts there are still overly complex models in operation. Consequently, there are opportunities to improve governance arrangements and service development.

Methodology

Between May and August 2021, a series of virtual and face to face meetings were held with relevant stakeholders across HSCNI. These meetings enabled the facilitation of open dialogue in which the stakeholders, both clinical and non-clinical were able to express their views on the current services and comment on any concerns they had, what was working well and where they saw potential for improvement and service development.

The meeting saw engagement from a number of Key stakeholders including, but not limited to, orthotists, British Association of Prosthetists and Orthotists (BAPO) representatives, AHP's, GP's, Administrative support, AHP leads, orthotist service managers and Trust informatics departments.

Key Findings

There were many issues raised through the consultation and the full report examines these in more detail, but there were key themes that were recurrent in every meeting and replicated across the whole service. The fundamental problems across the services are the complexity of the models in place, the lack of staffing resource to adequately meet demand and the fact that a clinical service is being driven by a financial contract.

The whole way through the patient's journey, from referral to discharge there are unnecessary obstacles and delays caused both to the service user and clinician by a needlessly complex system. The entire clinical service is driven by a financial procurement model as opposed to being shaped by evidenced based care and best practice. There are few clinical pathways in place and the orthotist Service has no care pathways for frequently seen conditions. Access to the service is not uniform across the 5 Trusts, and in many instances the two main sources of referral, physiotherapy and podiatry are not able to refer directly to the orthotist service. This causes a number of problems not least an increased delay for the patients. In many areas services referring to orthotists have developed workarounds to ensure that patients can be seen in a timely fashion, but these workarounds are not sustainable, nor do they address the underlying cause of the problems.

The current capacity of the orthotist service is being massively exceeded by the demand. In most areas there is no potential to grow and develop the service as the clinicians are devoting all their time to the treatment of patients. The clinicians are often practicing as expert generalists without the clinical framework of specialist and advanced practice clinicians available to support them.

The service is also suffering from a lack of a voice in Trusts. There is often no one representing the orthotist service at key strategic meetings, and this leads to the service often being considered as an afterthought which again leads to the stifling of innovation and service development. Orthotists tend to have little say over the delivery and direction of their service and are also sometimes not autonomous in the most basic of clinical tasks such as triaging of patients or in the prescription of orthotic devices.

Key recommendations

The review identified several challenges facing the orthotist service. Every referral source represented at the meetings identified problems with their patients' journey and highlighted areas where the patients' pathway could be improved. The issues identified are complex and many of them are not easily fixed. A number are a result of the contractual model that is in place and the financial constraints placed around the service limiting the Trust's ability to provide a different service model. It would be easy to assume that simply moving away from a contracted model and delivering an in-house orthotist service would therefore solve all of the problems, but this simply would not be the case. Moving to an in-house service without addressing the fundamental problems with the service and the workforce challenges would result in the service and service users facing the same challenges. Providing solutions for the complexity and size of the problems facing orthotist services is beyond the scope of this exercise. It is therefore the main recommendation from this paper that the Department of Health commission a working group to take forward the recommendations made in this review of orthotist services in Northern Ireland. The working group will need to follow on from this scoping paper and address the issues of the current workforce shortages, look at the development of evidenced based clinical pathways and investigate ways of introducing more structure to the orthotist service, with the development of advanced and specialist clinical services being delivered through a Hub and Spoke clinical model. They will need to explore the possibility of introducing service leads for the orthotist service to ensure that there is someone who is able to drive forward innovation and change within the service at the same time as being accountable for service delivery within each Trust.

When these issues have been addressed, and the orthotist service across the region is structured correctly allowing the orthotists to practice at the top of their license with referral and clinical pathways in place that are equitable to all, only then can the service model be considered. The working group will have to look at the financial and governance implications of the different service models and through a full in-depth benefits analysis determine which is best suited for the delivery of orthotist services in Northern Ireland.

Some of the recommendations made in the paper are the responsibility of the trust and they can and should be addressed quickly and easily. Situations such as lack of access to essential computer systems and working in rooms without a desk are not acceptable and do little to make the orthotists feel valued.

Section 2: Definition of terms

A detailed definition of terms and list of abbreviations can be found in Appendix 7

Orthotic	An *orthosis/orthotic* is an external device used to apply force or modify forces acting upon the human body in order to improve mobility, aid function, provide support, correct malalignment, protect, facilitate healing or reduce pain/discomfort.
Orthotist	Orthotists are defined as clinicians who assess gait and movement in order to provide engineering solutions to patients with deficits of the neuro, muscular and skeletal systems.
Orthotist Assistant	The orthotist assistant is a non-professional clinic-based role.
Orthotist Technician	Employed by the manufacturing companies the technicians work in the manufacturing suites and orthotic labs manufacturing the devices prescribed by the orthotists
Orthotist Services	The orthotic service is a specialist service providing stock, modular and bespoke orthotic devices to a wide-ranging group of patients in order to support and improve posture, maximise function and mobility reduce pain and correct deformity
AFO	Ankle Foot Orthoses is a type of orthotic device that is used to aid function and

	control in the lower limb,
KAFO	Knee Ankle Foot Orthoses. A type of Orthoses worn on the lower limb that is used to aid function and control across the Knee, ankle and rear foot.

Section 3: Introduction

The World Health Organisation (2017) estimate that 1 in 10 people will require specialist prosthetic and orthotic treatment at some point in their lifetime with 0.5% of the population accessing services at any one time. In Northern Ireland this would extrapolate to 10,000 potential people currently accessing services.

Orthotic services can play a significant role in keeping people mobile and independent, deferring the need for surgery or expensive social care services (Pathfinder report 2004). It is widely evidenced (Orthotic pathfinder 2004, NHS Orthotic Managers Group 2019,) that every £1 spent on orthotic devices saves the NHS £4, and the requirement for the orthotists to be included as a key member of the MDT is clearly proven in a number of reports (NHS England 2015, BAPO 2021,) and are cited in the Nice Guidelines for the Diabetic foot, Stroke and Rheumatology. Despite this overwhelming body of evidence demonstrating the effectiveness of the orthotic service and the significant improvement that can be seen in patient outcomes with timely and effective orthotic intervention, the orthotic service is still largely seen as a 'Cinderella service', with it being poorly understood and generally not viewed as a priority service for development (NHS England 2015). It is recognised that in HSC the orthotist service is often difficult to access as a result of complicated referral pathways. This results in a lack of awareness of the orthotists scope of practice with siloed working and large variations in the provision of orthotist services across Northern Ireland

As a result of the ongoing Department of Health led orthotist workforce review and the creation of a regional Orthopaedic Network Board, the Chief AHP Officer in the Department of Health requested an orthotist service review. The aim of this review is to scope the orthotist service in each HSC Trust (and regionally) and provide a high-level overview of how the service is currently being delivered. In addition, the review should identify the challenges faced as well as the opportunities for improvement. A high-level review of the current service provision was conducted with extensive collaboration across all HSC Trusts and a range of key stakeholders (Appendix 2).

Section 4: Methodology

The review was established in May 2021 with the aim of scoping the existing service provision to provide a picture of how the service is currently being delivered across the 5 Trusts and identify the challenges faced as well as the opportunities for improvement. The review looked at all aspects of the service and patient journey. Information was sourced from Trust systems and Informatics teams and face to face engagement sessions with key stakeholders in each Trust including, Admin teams, service managers, finance teams and clinicians working with and referring to the service were undertaken.

The engagement sessions were guided by a series of questions aimed to promote debate among the group and provide an understanding of how the current model was operating in each Trust. Separate sessions were held with the Orthopaedic consultants and the orthotists themselves.

As a result of the review a series of recommendations have been made that if implemented could help deliver improvements that will help lead to a responsive, timely, cost effective, efficient orthotist service.

Section 5: Current service Provision

There are two contracted companies delivering the service. The Ability Matters group are contracted to provide the Trust model in Northern Trust. SG Bulls are contracted to provide the service in each of the other Trusts. In addition to these Trust clinics there is a regional service which operates from Musgrave Park hospital. The regional service has clinics in Musgrave Park hospital and outreach clinics (MPROS) across all of the Trusts. SG Bulls provide this contract. This contract is separate to the individual Trust contracts and the delivery of the regional service into the Trusts is coordinated from Musgrave Park hospital.

There are no orthotist assistants employed in Northern Ireland. There are orthotist technicians employed by both companies to manufacture the orders prescribed by the orthotists. These technicians manufacture devices for all of the contracts that the company has secured not just the HSC contract.

The service currently sees patients of all ages and treats patients with a wide range of conditions including diabetes, arthritis, cerebral palsy, Stroke, Spina Bifida, Scoliosis, MSK, sports injuries and trauma. Services are delivered from both community and acute sites and across the region there are over forty clinical sites from which services are routinely delivered. The list of clinical locations can be found in Appendix 1.

Through consultation and collaboration with key stakeholders across the region (outlined in Appendix 2), a number of key areas relating to the current service provision have been identified. These key areas are detailed below and include the challenges faced across orthotist services in addition to elements of the service that are being delivered successfully. The key areas identified are:

- Service accessibility
- Workforce
- Clinical Environment
- Governance

Section 6: Service Accessibility

This review highlights the complexity of the service models currently in place and the inconsistencies in how service users can gain access to services. Across much of HSCNI the orthotist service is funded as a consultant only access service. Consultant only access is linked to the original historical funding model for the services as the invoices are recharged to the consultant budgets on issue of the device. Some Trusts have taken a decision to open referrals up to AHPs and/or GPs whilst other Trusts operate a consultant only referral pathway. This inconsistency across the region has led to an inequity in patient access with people in certain postcodes not able to access services that could improve their health outcomes. Patients who require the orthotist but are not under a consultant have no formal way of being referred to the service in certain locations. In some areas workarounds have been put in place and agreements made with consultants so that patients can be referred under their name despite not being under their care. In addition, inappropriate referrals are frequently made with patients being referred or re-referred to Consultants to gain access to orthotist services. Given the current elective care waiting list challenges it is not appropriate for patients to access the orthotist service in this way.

There is a need to get a uniformed and agreed process in place for referral into orthotist services across the region. The implementation of open access will:

- Reduce patients waiting times for orthotist intervention. Although direct access will see a rise in referrals patients of approx. 20% (Pathfinder 2004) the patients will be referred timelier as opposed to being referred via another service.
- Prevent patients being inappropriately referred to Orthopaedic consultants or GPs for onward referral, freeing up their capacity.
- See improved patient outcomes as a result of timely access and intervention.

The lack of open access is a fundamental flaw in the current pathways that result in unnecessary delay leading to worse patient outcomes, duplication of work and increased pressures on GPs and Consultants.

In areas where direct access has been established it has only seen minimal additional increase in referral rates, but significantly improved patient journeys with improved outcomes (Improving the quality of orthotics in England 2015).

Not only does the consultant authorising and signing off the referrals from other professions lead to delays in referral but it also creates confusion and an obstacle in reporting back to the original source of the referral. Orthotists highlighted that they are often unaware of the original source of the referral and provided all correspondence back to the Consultant or GP.

It is immediately evident when discussing the service in trusts that the clinicians involved in delivering the services are very dedicated and driven to try and improve the service for their patients, There are some excellent models of MDT working and innovation displayed in every Trust, but unfortunately the clinicians are trying to deliver a service within the constraints of an incredibly complex service model which is ultimately resulting in the service being delivered based on finances as opposed to clinical decision making.

Many of the clinicians expressed huge frustration at having to work within the limitations imposed of them. There are examples in every Trust where workarounds have been put in place in an attempt to improve the service, but workarounds are not a sustainable way of delivering and developing an equitable service model whilst maintaining tight clinical and financial governance. Many of the challenges linked to access are evidenced in the Case studies in Appendix 3

Consultant only access also leads to problems with patients re-accessing services. In some areas patients remain in services for life because discharging them following an episode of care leads to them requiring re-referral when needing a repeat device or a repair. Once a patient is in the service it is easier to allow them to self-refer for further care, even if this further care is not linked to their original reason for referral.

This lack of episodic care leads to challenges in evidencing when a patient's episode of care has been completed, and also causes inequality in access to the service with existing patients who perhaps have not accessed services for a number of years being able to contact and access services far easier and sooner than patients on the waiting list.

Without closed episodes of care and outcome measures for those episodes the only reporting for services tends to be based solely on the numbers of sessions provided, the number of devices prescribed, and the timeframes and costs associated with the delivery of the product. As highlighted in the Pathfinder report (2004), this results in no shared understanding or information base on which to support clinical improvements to the service or justify investment.

Episodic care must include the need for a review appointment following issue of the device, but in some services, this is not the case, and patients are discharged when they receive their orthotic. If the patient requires a review of their device or has a problem, they are able, depending on the time elapsed from their last visit, to self-refer but are sometimes opened as another episode.

Episodic care is the service model recommended by BAPO in the standards for best practice 2020 but it has to be developed in conjunction with appropriate resources to enable adequate review before discharge and a suitable access model that enables it to be delivered effectively, efficiently and equitably across all Trusts.

A lack of episodic care leads to challenges in evidencing when a patient's episode of care is completed and causes inequalities in referrals to the service and challenges with recording service data.

A complex referral model combined with the differing contracts in place between the Musgrave Park hospital regional (MPROS) model and Trust orthotist clinics leads to challenges for patients and clinicians alike. Patients cannot be easily transferred into a community model when they have previously been seen as part of the MPROS model. Orthopaedic Consultants highlighted this as a problem as they can only refer

into the parts of the service that are linked to their model, but these often have longer waits than the community models. There is also a clear opportunity for patients to abuse the system, as without a standardised ICT system across the services patients can easily duplicate their care and provision of devices by accessing both the Trust and the MPROS clinics.

Workarounds put into place by services to try and by pass complex referral pathways. One such example is in the Royal Belfast Hospital for Sick Children service (RBHSC). This service has evolved out of a clinical need and does not actually make up any part of the existing contracts. Physiotherapists are taking the opportunity to identify the potential future need for the orthotist service when the children are inpatients. The Neurology Consultants can sign off the referral for the children, enabling them to access the service in a timelier manner as opposed to them being referred through an Orthopaedic route as outpatients which could lead to long delays in the children receiving care and an adverse outcome.

Triaging of referrals

Orthotists must have sight of the referrals to their service and be involved in the triaging. Where the orthotists are not involved in the triaging there is less opportunity to ensure “Things are right 1st time”. Patients correctly triaged to the right clinician in the right clinic have a much higher chance of receiving a device that is functionally correct for them on their first appointment. The failure to get things right first time is resulting in avoidable inequalities in access, worse outcomes, poor patients experience and poor value for public money (improving England 2015). No Other AHP service has their referrals routinely triaged by other services.

Orthotists involved in the triaging of their own and regional MSK referrals would:

- Prevent a high number of referrals being sent inappropriately to the Orthopaedic team.
- Reduce waiting times for patients.
- Enable a timelier intervention by the correct level of practitioner.
- Enable orthotist patients to be fully worked up in core services before being referred to Orthopaedics.

Review Appointments

Review appointments are not routinely offered to patients in the majority of clinics, this is mainly due to demands on the orthotists time and the prioritizing of new appointments and fitting appointments over reviews. Some models of telephone or Virtual reviews are in place. These need to be explored as a potential option for the whole service, but they must be evidenced as being a suitable way of capturing comparable outcome measures before being relied on as the sole means of review. A Neuro-Physiotherapist highlighted the importance of review appointments. Work that had been undertaken jointly with the Physiotherapy and orthotist utilising Video gait analysis highlighted that many patients have worse outcome measures immediately following fitting of the device but significantly improved on review. This initial deterioration can lead to patients discontinuing the use of their device believing it not to work whereas in fact a timely review and close MDT working can bring the device back to good effect.

Orthotists highlighted that clinics can often lack structure and can be full of either new or fitting patients. A very sensible 40:40:20 ratio of New- fitting and review model which is operational in Northern Trust would seem a sensible way of ensuring the availability of at least some review appointments. It was also suggested that orthotist assistants could be utilised as an effective way of providing review appointments to low-risk patients.

Continuity of Care

In areas where more than one orthotist is working there can be challenges with the continuity of care. One orthotist cited that a patient that was being seen for a review appointment had seen a different orthotist at every step of their journey through the service. The initial assessment, fitting appointment, issue and review appointment had all been carried out by a different practitioner. The problem is again linked to how the services are commissioned. As highlighted in the orthotics campaign (2014), if services are commissioned on the basis of certain clinic sessions being required, these will be scheduled and booked by Administration teams whether or not the regular orthotist is present therefore disrupting continuity of care. It should be standard practice that if a treatment plan is being followed the patients should, as far

as is practically possible, be booked in with the same orthotist for the duration of that treatment unless it is otherwise requested by the clinician or the urgent need for the appointment does not allow for it.

Autonomous clinicians and provision of devices

The profession is suffering from a lack of understanding of its role and in some areas a lack of respect for the autonomy of the clinicians. Across a number of Trusts referrers are providing prescriptive referrals requesting that the orthotist provide a specific device or stipulating the number of devices the patients is allowed. The orthotists are autonomous practitioners and any referral to the service should be made for an assessment by the orthotist. There are examples where the clinicians have been challenged by admin if they have not ordered the device that has been specified in the referral despite the responsibility for the device resting with the prescriber not the requester. In some Trusts this also extends to the provision of duplicate or repeat devices having to be sanctioned by persons external to the service. This has no clinical merit and only serves to be an additional delay in the patients receiving their device.

The provision of devices across all of the models should be based on clinical need and guided by current models of best practice. Two pairs of footwear are routinely given to patients which enables them to have at least one pair of shoes available to them if the other pair is being repaired .In some instances it is not appropriate to issue more than one device, particularly in Paediatric clinics where the child is growing and their needs change frequently.

Although ankle foot orthosis (AFO's) and Knee ankle foot orthosis (KAFO's) tend to be more robust than footwear and do not wear out in the same way there is a need for the devices to be refurbished or repaired. In Trusts where two devices are not routinely given there needs to be an understanding of the risks associated with the patient being without a prescribed device whilst it is being repaired.

Transition from Child to adult clinics

Paediatric services are delivered in a range of different models across the Trusts. Some Trust have combined services where there is no split between the delivery of Paediatrics and Adults clinics, other Trusts have distinctly separate paediatric clinics.

Some services are provided to children in SEN schools, but this is not standardised across the region or individual trusts. Some SEN schools have no orthotist service provided. Providing the service in the schools becomes complex as it depends on the referral pathway for the child as to which Trust and which pathway they sit under. In Parkview School in Lisburn the majority of the children are under a regional consultant, so they access their care in the school through the Belfast Trust, but there are also children attending the service who were referred via the Trust physiotherapist they therefore sit under the SET contract. This leads to children attending the same clinics but different Trusts making their appointments.

A Physiotherapist highlighted the importance of clinics in SEN schools. Seeing the SEN child in an environment, and with staff that they are familiar with leads to a far more favourable experience for the child and a better outcome, but all attempts to start delivering a service in her Trust have been refused on the grounds of inadequate service funding.

The transition from child to adult services is complex, and often patients fall out of the system as they need a new referral, often from a consultant to receive continued care on an adult pathway. Again, workarounds have been put in place and in some areas young adults are continuing to access children's services until they can be appropriately referred.

Section 7: WORKFORCE

BAPO (2005) state that there should be one orthotist per every 35000 people in the population. In Northern Ireland there is currently one WTE orthotist per every 231,707 people.

The size of the workforce is one of the key priorities that need addressing. The service is currently lacking the number of orthotists required to adequately meet the clinical demands across all aspects of the orthotist service. The orthotist Workforce draft review (Department of Health 2021) identified the need to have more orthotists working in Orthopaedics services, Diabetes care ,Neurology, Rheumatology, Stroke services (both acute and Chronic), Learning disability, Paediatrics and Falls prevention. There is also the need to consider the future development of services such as the expansion of Lycra services. The orthotics campaign (2014) highlighted that these workforce challenges faced orthotics services all across the UK highlighting that there needed to be a 50% increase in the number of orthotists practicing in order to deliver appropriate models of orthotic care. Figure 1 below outlines the ration of orthotists per population within Northern Ireland.

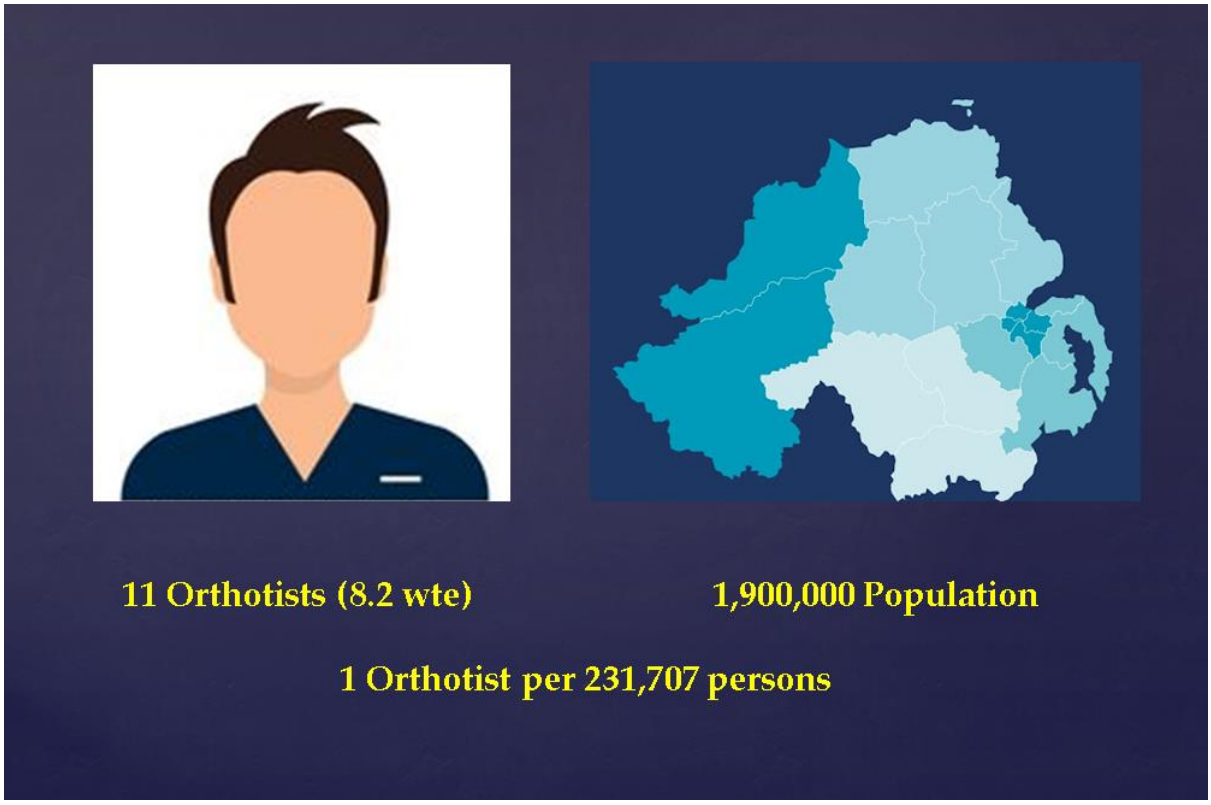

Figure 1: Staff population ratio

Increasing the orthotist workforce will also enable better utilisation of AHPs working at advanced levels of practice delivering elements of service that could be delivered by entry level orthotists. In order to meet current demand for orthotics and footwear there are highly skilled AHPs in both Podiatry and Physiotherapy practicing at advanced levels who are taking on tasks that are core work for an orthotist or an orthotics technician. The role of the Podiatrists and Physiotherapist working directly alongside the orthotist is certainly required and should be continued as part of essential MDT working, but it should be to utilise their specialist knowledge of footwear and orthotics in combination with the orthotist.

Clinical structure

There is an absence of a clinical structure within the orthotist service and a lack of a clinical career progression pathway. Unlike any other AHP service, the majority of the orthotists are practicing as expert generalists and are required to have specialist knowledge across a range of different anatomical sites, pathologies and devices. This model is driven by the size of the current workforce and the contract as opposed to clinical excellence.

Across all other AHPs there are identified clinical specialties with staff having expert knowledge in specific fields providing advanced level practice and having Trust wide expert roles (figure 2). This ensures good clinical governance for the service and enables the clinician to focus their clinical development on a specific speciality. The service managers and clinicians can then provide a structured approach to the clinical and educational development to ensure that they are fully equipped with the expert level of knowledge that is required. This model enables complex patients to be referred to the correct pathways to be assessed and managed by clinicians with the specialist knowledge. The current orthotist model results in the orthotists having no clear route for referring complex patients and little access to peer support when required.

Current structure in place has most staff working as expert generalists with only very few specialist clinics being delivered. The Clinical structure in the orthotist service should mirror other AHP services.

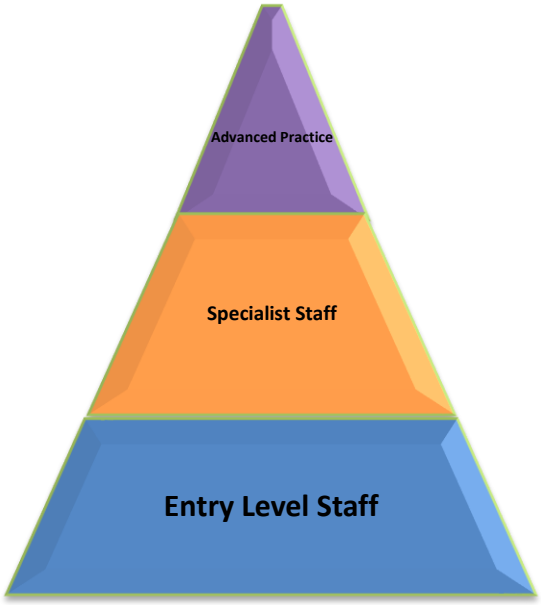

Figure 2: staffing structure of AHP services across trusts

This will enable advanced and principal orthotists to have a Trust/region wide specialist remit providing advanced practice and expert support for complex cases within their own field of expertise.

The creation of advanced and principal orthotists with specialist interest in specific pathology and body parts will also enable the creation of co-located clinics with the orthopaedic surgeons and other AHPs which will benefit in the review of post-surgical patients.

Service organisation

Much like the models seen in Scotland in the Scottish orthotic services review (2005) the Northern Ireland model has the same amount of variation in the way that the services are managed day to day within each Trust. Across the 5 Trusts the operational management of the service is the responsibility of a number of different people in different roles including:

- Podiatry Managers.
- AHP Leads.
- Admin and Clerical support.
- Appliance officers.
- Nursing services manager.

As was cited in the Scottish review (2005), individually many of these services operate to a satisfactory level when viewed in isolation but are unable to provide the coherent strategic planning that is required for the service regionally.

When considering the best model to operate in Northern Ireland consideration needs to be given to the limited number of orthotists and the rural geography of Northern Ireland. This situation would lend itself to the development of a Hub and spoke model with specialist expertise and advanced level practice being provided in regional centres as outlined in figure 2 above and figure 3 below. This would ensure that orthotists would be able to avail appropriately of the specialist skills of colleagues when required as well as maintain the less complex caseload in centres closer to the patient's home. In order to achieve this model and provide a more cohesive equitable system the service will need to be considered in its entirety as one service as opposed to the numerous disparate, silo services that are currently operating across the Trusts.

A centralised service will also create an opportunity for a properly structured management structure. Whether the service is contracted, employed in Trust or a hybrid model there is a need for a central coordination which can only be achieved by having an individual person or leadership team devoted to both coordinating and maintaining responsibility for the service. As with all AHP services and following the

advice in the Scottish review (2005) it would be appropriate for this role to be carried out by a qualified orthotist.

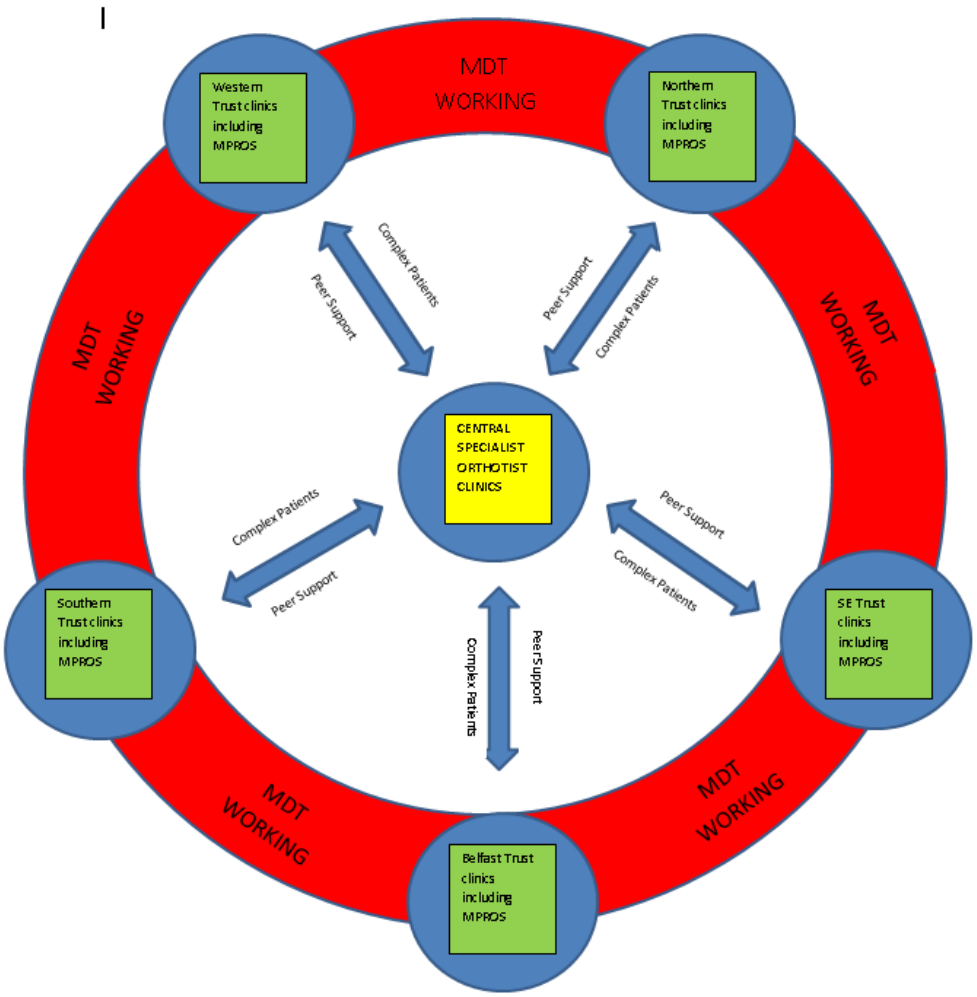

Figure 3 . A hub and spoke model for Orthotist services.

Orthotist Assistants

Developing the role of the orthotist Assistant practitioners in Northern Ireland can help to address some of the shortfall in current staffing levels. Assistant grades are easier to recruit to and the orthotists assistant's role is well defined and evidenced to reduce pressure on the orthotists clinics as well as free up additional capacity. It must be remembered though that unless working in an area where the orthotist assistant is able to be supervised the benefit of their role can be negated. There is also the opportunity to utilise current apprenticeship programmes in operation that would enable the assistant grade staff to be trained as orthotists helping to bridge gaps in the workforce.

Administration support

In order to ensure the best possible clinical governance, and the most efficient patient journey it is crucial that any new model or structure also includes a fully funded administrative service. The Pathfinder report (2004), The Scottish review (2005) and the Improving the quality of orthotics service in England (2015) all emphasise that the Clerical and admin support are vital members of the orthotist team. The Scottish review (2005) recommends that the Administration team should sit within the orthotist service and be ultimately accountable to the professional head of the service. Most models currently in place have administration services whose substantive post sits with other services but who provide hours into the orthotist service. This is often done with little or no transfer of funding impacting on both the substantive service and the orthotist service. Having an administration team that sits outside of the orthotist service , and administration staff who are not directly accountable to the orthotists has proven difficult in some areas. Orthotists have felt unable to challenge situations imposed on them such as inappropriately or excessively booked clinics, and additional patients added to clinics without appropriate records or charts. In some scenarios the orthotists have had their clinical decision making and prescriptions questioned by people in administration roles.

With the orthotists having no direct authority over the administration teams and differing managerial lines, this results in a lack of structured supervision. These issues have the potential to end up going unresolved leading to increased clinical

stress and frayed working relations. Issues with overcrowded clinics stem from the pressures of finances and waiting list management. The challenge of trying to accommodate the number of patients requiring care into the limited number of sessions that had been specified in the contract leads to patients being booked in inappropriately as extras.

The review has evidenced some excellent collaborative working relationships between Administration teams and the orthotist. In Trusts where a culture of working together and respect has been established, it has been utilised to help the service fulfil its full potential and achieve maximum benefits for the patients. The future development of the service needs to fully consider the role of the Administration team in supporting the orthotist service. With the advancement of technology and the development of orthotist specific digital systems, the Administration team should be able to engage with these systems easily and readily to fully support the orthotist and the patient.

MDT working

Orthopaedic consultants have highlighted the lack of access to orthotist services post operatively. There is an identified need for immediate post-operative MDT assessment with the orthotists to ensure that patients receive the appropriate orthotic device in a timely fashion, optimising surgical outcomes and reducing the likelihood of post-operative failure. Whenever patients have a procedure that alters their biomechanical function, they should always have a post operative evaluation for orthotics (Levine 2018). Also, Co-Located clinics help to build up Trust, confidence and respect between all involved in decision making and the patients care (Barr 2021). The model of co-located clinics is currently in place in some Trusts. In the Belfast Trust Diabetes centre the orthotists work as part of the Multi-Disciplinary Foot Protection Team (MDFT). The scope of the role has seen close working between the Orthotist, Podiatrist and the Vascular/Orthopaedic surgeons with beneficial outcomes for patients but there is a need for this model to be expanded across all Trusts, especially in the regional Orthopaedic model so that the orthotists are viewed as an integral part of the MDT at all stages of the patient's journey.

The presence of the orthotist at MDFT clinics ensure immediate access for prescription of orthoses and footwear, hence reducing delays in management plan, improvement in healing times for ulceration, prevention of further pathology and education for the patient.

Partnership working with the orthotist, podiatrist and orthopaedic consultant allow complex issues to be dealt with in a timely manner, which offer best outcomes for the patient.

MDFT Podiatrist

Addressing the workforce deficit

The orthotist workforce review document (Department of Health 2021) has considered the deficits in the current workforce, but the recommendations made in this paper do have the potential to positively impact on the available workforce. Consideration must also be given to:

- How best does HSCNI orthotist service attract new Graduates from the UK?
- How Does HSCNI attract both existing and new graduate orthotists from Northern Ireland to return to Northern Ireland?
- How do we increase the number of Northern Ireland applicants to the UK courses?
- The development of an apprenticeship model in Northern Ireland or linking in with apprenticeship models already established in England to train non registered orthotist assistants and Technicians as orthotists.

Section 8: Clinical Environment

The accommodation used to provide the service is often not sufficient for either the patients or the orthotist. There are few dedicated orthotist specific rooms and clinical rooms utilised are often borrowed from other services and can lack the basic requirements of the orthotist. Any clinical units used by the orthotists must not only have adequate clinical facilities but also sufficient office furniture to function properly. Orthotists reported working in clinics with no desks and no chair for them to sit on. The orthotists rooms, as a minimum, must meet the basic requirements of any clinical space and as far as is practically possible align to the BAPO recommendations (Appendix 4).

Gait analysis is an integral part of correctly prescribing a device for a patient. Currently across most services there is limited availability for the orthotist to do this properly. Few locations have access to designated walkways or parallel bars, both of which are recommended by BAPO as being requirements of a suitable environment for an orthotist's clinic (BAPO 2021). Patient privacy can also be an issue. Without adequate facilities to observe the patients walking a suitable distance (a minimum of 10M in order to undertake validated Outcome measures) patients are required to walk up and down public corridors which is not acceptable either for the clinician or the patients.

The Pathfinder report (2004) recommended that in order to achieve optimum clinical efficiency the orthotists should have two rooms co located; this enables two clinics to run simultaneously with the orthotist working alongside either another orthotist or an assistant with delegated responsibility. This also enables the orthotist to have peer support and frequent informal supervision with colleagues, something which is also currently lacking. Some orthotists reported that they could go for months at a time without face-to-face contact with another orthotist in the Trust.

With the increasing numbers of Health and Care centres being built, the orthotists should work closely with the Podiatry, Physiotherapy and Planning departments to either have a clinic room dedicated to the orthotist service built in close proximity to the gait analysis labs being utilised by Podiatrists and Physiotherapists or assurance

that the room they will be utilising is fit for purpose. The Western Trust reported that in the new City side development, extensive accommodation for the orthotist service has been proposed. Ballymena is also an excellent example of why this model should be considered in all future HCC builds. The orthotist has use of a Podiatry Gait analysis room which leads directly onto a private walkway with gait analysis equipment and a connecting Physiotherapy room with Parallel bars. The orthotist also has direct access to orthotic manufacturing machinery for the immediate adaption and repair of devices.

A clinical room for the orthotists must include adequate storage facilities. Adequate storage enables the introduction of a large consignment stock, which will enable the orthotist to issue frequently prescribed devices immediately form a held stock that can then be topped up through the ordering process. A Physiotherapist highlighted this as a problem in the service identifying that sometimes the biggest delays for the patients were between assessment and issue of the device. It is arguable that with an adequate consignment stock many of those patients could have left their initial assessment appointments with a suitable device.

The clinical locations should be flexible enough to both meet patient demand and deliver effective MDT clinics. If clinics are working in acute sites, then consideration needs to be given to the requirement to work on the wards, currently in most Trusts the ward visits are not factored into the clinics, as the need for them cannot be easily equated. This results in the orthotists often having to see ward patients in their lunch break or as extras squeezed in at the end of sessions. Trying to facilitate unscheduled clinics is challenging because of the contract in place and the sessional way in which the orthotist's time is charged to the Trust. There is little flexibility to allow for anything other than scheduled clinic appointments.

The orthotists need to be visible in the acute settings and on the wards and seen as a crucial part of the MDT in order to aid discharges. The development of a more multidisciplinary approach to the provision of orthotic care, involving appropriately trained AHPs and the development of MDT clinics for specific conditions has had a positive impact on care for patients, it has helped reduce waiting lists as well as speed up treatment and reduce length of stay (NHS England 2015).

Appropriate clinical facilities need to be accompanied with the appropriate access privileges. The orthotists need to be considered as valued members of Trust staff whether they are a contracted supplier or employed. It is not standard across the region for the orthotists to have Trust ID badges. As these badges are now routinely utilised as security passes to open secure doors many orthotists have the indignation of routinely relying on other members of staff to allow them through doors simply to access their clinics.

The orthotists reported that there are very few of the clinics that they work in that are signposted properly and appointment letters often go out to patients informing the patients that the clinics are being held in rooms belonging to other professional groups. The clinics are rarely called the orthotist clinic, and the terminology used varies greatly between Trusts. This lack of standardisation does little to help increase the profile of the orthotist service and creates an impression to the orthotists that they are considered as less important than other professions.

I feel more like the hired help as opposed to a valued member of the MDT.

An orthotist working in Northern Ireland 2021

Section 9: Governance

Patient Records

The review has identified some governance concerns particularly in relation to record keeping. The orthotists, AHPs and orthopaedic consultants have all raised concern that the orthotists often did not have full access to the patient's clinical records. This can result in the orthotists seeing patients without background knowledge of the referral or the patient's previous medical history or investigations. Access to the patient's records and electronic records systems is vital in ensuring robust governance, effective communication between departments and the optimum outcome for the patient.

Current access to electronic systems for the orthotists is not uniform, with some orthotists having full access to ECR and others, particularly those working in Southern Trust having little or no access to any electronic systems. There is not one standardised electronic system for the orthotist service and there are different methods of recording the patient record and recording the number of contacts. In some Trusts the orthotists are able to enter their own clinical codes, in others they are reliant on administration services interpreting what they have done to then insert the most appropriate clinical coding.

> My Patients have access to the Clarity system to check in for their appointments, but the trust will not allow me access to the system to check if they have arrived.
>
> Orthotist working in HSC.

It is the hope that the encompass model due to start roll out across the Trusts in 2023 will address the current issues in the reporting and recording systems used by the clinicians, appliance officers and administration teams across the Trusts.

Currently different systems are used across each Trust and different systems are used for different aspects of the model within the Trusts. The current systems are disparate and cannot communicate with each other means that patients can, and often do access more than one element of the orthotist service at the same time. It is

quite easy for patients to obtain devices from the orthotist in the Trust community model at the same time as attend the MPROS. Only the OPAS system was designed specifically for orthotist services, but this system is antiquated and in the view of some no longer fit for purpose.

Across the region there are examples of spread sheets and databases being maintained by Administration services or the professional clinicians that are used to track the process of orders, review waiting times and identify delays in service provision. This has been done in the absence of a suitable regional ICT system that should be in place.

There are many examples across the UK of computer systems that will provide everything that the orthotist service in HSCNI needs, and it is essential that these systems are looked at as being a solution to the current ICT problems faced by the services. Any computer system should also have the ability to record patient's notes. Despite some Trusts already having the ability to record notes electronically this has not been put into place for the orthotist services. Any system put in place should enable the clinician to meet all aspects of clinical record keeping as set out in the HCPC professional standards (HCPC 2021).

A fully functional orthotist ICT system is essential in helping to capture a range of valuable KPI's including outcome measures and the full patient journey from receipt of referral through to review of device.

Current KPI's, which are put in place when the contract is agreed by BSO, do not capture all of the essential elements of the patient's journey. They instead focus on the number of sessions delivered, the number of devices ordered and the time it takes to receive devices back into the Trust. It was highlighted that the device being back in Trust does not evidence the patient's full journey and there have been many incidences of devices ready for issue sitting on shelves awaiting the patients being appointed so the device can be issued. The orthotist service is an example of where the quantity of service being delivered is being used as a measure of quality.

Outcome measures

Mirroring the findings of the 2015 NHS England report, there is a clear lack of measurable standards for orthotic services across Northern Ireland. This is due to the previous commissioning models which are based around the delivery of a product as opposed to the quality of service and outcomes for the patient. Capturing Outcome measures is vital in evidencing the effectiveness of the service but in order to do this there needs to be appropriate reviews available. The pathfinder report (2004) highlighted that without a review appointment there is little formal control over the effectiveness of the device issued. Reactive approaches to review when it is left for the patients to contact if there is a problem is not conducive to providing Quality healthcare.

Clinical coding

Inconsistencies in coding contacts have been identified by the orthotists during the review. Without accurately recording the clinical activity any capacity and demand or workforce planning exercise becomes significantly more challenging. These challenges are exacerbated by the fact that there are no regionally agreed data definitions for the orthotist service.

Work by the Health and social care board (HSCB 2018) highlighted that in order to ensure accurate recording of data there is the need to ensure that:

- There is a consistent definition of what constitutes a new and review referral.
- There is a robust process to capture waiting times both for initial appointment, final issue/fitting and DNAs, CNAs.
- Clear definitions on each waiting time categories to help determine exact waiting times at each stage of the journey and for the complete patient episode.
- There is consistency in the categorisation of urgent, routine and review appointments.

- There are clear consistent discharge protocols in place that are the same across all Trusts to enhance capacity and reduce risks of on-going open professional duties of care.

- There are standardised operating procedures across the region for the replacement of orthotic devices.

The lack of available data is not a situation unique to Northern Ireland. A National review of orthotics data (2014) highlighted that there was minimal quantitative data available to review the quality of orthotic services. They cited that this lack of data was predominately due coding issues, poor recording and block contracts with a lack of tariff incentives.

Contract

The current contract is driving the service provision resulting in the service delivery ultimately being based on a finance model as opposed to best practice and evidence based clinical pathways.

The current model in place in Northern Ireland is a Hybrid model. The majority of orthotic service models across the NHS are contracted models, with approximately 68% of orthotic services are provided by external companies. (BAPO 2021)

The options of an in-house model should also be considered, the three models are discussed below and summarised in Appendix 8.

HSC needs to decide what it requires from a contract as opposed to just asking for a set number of orthotists. The orthotist service needs to have best practice clinical pathways in place evidencing the clinical time and the competency level of the orthotist required. These pathways should then be aligned to the population need to define the service delivery model. The current model of supplying orthotists and stock as opposed to a service, results in no one having overall responsibility for the service.

The orthotists companies both made the point that the 3-year contracts currently in place does not allow the companies to invest in additional staff. If a contracted model

is to be put in place, then a contract needs to be for a significant period of time with options to extend and renegotiate pricing, this will enable the companies to recruit staff based on the certainty of long-term employment. If the contract is specific and specifies the model that is required, then it will enable the tendering companies to recruit the correct volume staff based on the specific requirements of the contract.

Any contract put in place should be of sufficient length to allow for:

- The contracted company to invest in suitable staff resulting in a suitable skills mix.
- The service to develop a clinical leadership structure.
- Investment in and development of staff , knowing that the employee has a long-term future.
- Development and career progression of staff knowing that secure funding is in place.

The ability for the company to invest in the staff leads to a happier workforce who is professionally engaged. This will subsequently allow relationships to grow and services to naturally develop and improve.

In house, contracted and Hybrid service Models

Contracted models are where external companies are procured to provide the clinical service in the Trust. There are varying levels of service that can be procured, and it depends on the procurement contract put in place as to the level of service provided by the contracted supplier. In Northern Ireland the model is basic. The contracted companies supply orthotists to work in a set number of clinical sessions. These orthotists then order devices, invariably but not exclusively, from the contracted company and the companies either manufacture or source the product before returning them to the Trust to be issued by the orthotist.

More sophisticated contracted models can also be specified which will demand more of the commercial provider with the contracted company having input into the management and development of the service. Contracted companies can provide their own ICT systems to provide traceability, data analysis and outcome measures. Some companies have the ability to provide administration support to the services

and sometimes even the clinical facilities in which to operate the service. A fully managed contracted service can also see the contracted supplier being responsible for the procurement of all orthotic devices used across the Trust.

With an in-house service the Trusts are directly responsible for the provision of the clinical service. The Trust provides the facilities to run the clinic and also employs the clinicians to work in them. This includes the orthotists, orthotist assistants, Technicians and admin support. This model will also require the provision of a suitable manufacturing suite to manufacture and adapt devices, although there will still be the need to buy in some product which cannot be manufactured.

In reality most of the models currently in operation are a Hybrid of both of these models. The current model in place sees the contracted company providing the staff but HSC is retaining control of the administration of the services and providing the clinical facilities , alternative models could see the Trusts employing the orthotists but source all of the product through contracted external companies.

The Pathfinder report (2004) highlighted that the contracted status of most orthotists prevents them from being fully integrated into NHS healthcare delivery, and therefore the pace of change in the service is slow. This was highlighted by the orthotists where they felt they had no voice and little opportunity to represent their service at Trust strategic meetings stifling development of the service.

There are both positives and negatives to all of the models and they must be fully considered, and the options appraised in detail before the HSCNI decides on an appropriate model to take forward. Full-service contracts or Hybrid contracts can result in the contracted companies providing a more managed services where there is more partnership working between the contracted supplier and the HSC with favourable outcomes for both parties and the patients. It is however especially important to understand that implementing a new service model without first ensuring the correct clinical and financial governance is in place will not improve the quality of the service currently being provided. It is not the contract in place that guarantees success it is the service delivery model that is most important.

Waiting lists

The waiting list varied greatly across the Trusts. Not all of the Trusts are monitoring their adherence to the PHA AHP waiting list target of 13 weeks for a new patient assessment. In some Trusts a great deal of work has been done to try and increase the number of sessions provided by the orthotists in order to try and tackle previously large waiting lists. It is apparent that this has partly been achieved due to the availability of orthotists due to reduced clinics in other areas due to COVID-19. There is concern that the service models put in place, and the improvements realised during this time will not be sustainable without recurrent funding.

There was concern across all services including the Orthopaedic consultants, Podiatrists and specialist Physiotherapy services that currently patients are at risk of their condition deteriorating whilst they are waiting to access the orthotist services. Particular concern was raised by the Neuro Physio services and the SEN Lead in Belfast who both highlighted the finite timescales in which their client group need to receive appropriate intervention. Across the region there were reported cases of patients including children having to progress to surgical intervention due to delays in accessing appropriate orthotic devices in a timely manner.

Financial

The potentially for large financial benefits to Trusts in remodelling the delivery of orthotist services is well evidenced. Treating patients in a timely manner in primary care can negate the need for consultant appointments and more expensive acute interventions. Additional savings can also be realised by keeping frail elderly people mobile and independent, and by having orthotists playing a key role in the management of Diabetic foot ulceration.

Although the services should not be driven by finance or restrained by resources (patient Charter 2011) there does need to be consideration given to the financial implications of developing a new model in HSCNI. In order to fully understand the financial implications of the different models there will need to be a full examination of each model and the associated financial impact. Consideration should be given to the costs of establishing an in-house model compared to the cost of an effective

contracted or Hybrid model. These models should be fully costed and also consideration given to whether they be block contracts, Tariff based models or schedule based.

It must also be understood that the current levels of funding are not meeting the demands of the patients or the service users. The service is currently significantly under resourced and would require considerable further investment just to maintain the status quo. None of the Trusts felt that they had enough availability of orthotists to provide the level of service that was required. Some Trusts have temporarily increased the number of sessions being provided by the orthotist, but this has the knock-on effect of increasing the number of prescriptions, adding to the cost of the service and increasing the workload for the technicians. Increasing the numbers of orthotists in isolation to the full process will ultimately lead to significant delays in manufacturing and reduced patient outcomes.

Any new model must include robust financial governance at every stage, including the correct people approving and authorising invoices. There was poor representation at the service meets from those with financial responsibility for the orthotist service. In order to ensure tight financial governance Finance departments will need to proactively engage with any future review.

PPI

To date across all 5 Trusts there has been little service user engagement undertaken. It is recommended that a PPI exercise enabling service users to comment about their experiences of the service they have received is conducted. It is good practice to involve service users in the planning and future provision of the services that they access. Structured service user audits and the use of real time feedback tools such as Care opinion can be crucial in providing insight that can be used to improve the level of care being delivered.

Section 10: Conclusions

I have been privileged to undertake this review on behalf of the Department of Health. I have had interesting open discussions with representatives from all Trusts about the provision of services across the region. These meetings have highlighted the challenges facing the orthotist service and its key stakeholders but more importantly they have demonstrated the opportunity that is now available to us to develop an orthotist service that will meet the needs of the orthotists, the clinicians using the service and most importantly the patients.

The current model is unsustainable, the orthotists , despite their dedication and enthusiasm for their job are simply too few in number to provide the service that is required to meet the ever-increasing demands of an increasingly complex population. In the words of one person who attended the Trust consultations, “The orthotists are trying to deliver a service with their hands tied behind their backs”. Timely orthotist intervention is well evidenced to improve patient outcomes, reduce referrals to secondary care and save money. Unfortunately, historically the service has been under resourced and underrepresented and constrained by a financially driven contract which has led to many of the challenges it now faces.

There needs to be firm actions from the recommendations made in this paper with the orthotist service users and the orthotists able to see a clear strategic direction for their service and demonstration that their concerns have both been listened too and acted upon. A failure to address the issues identified in this report will lead to an increased disillusionment within the orthotist workforce resulting in higher attrition rates and increased difficulties in recruiting. With the current shortage of orthotists across the United Kingdom HSCNI has to ensure that they are an attractive proposition to potential employees, or they risk the employee going elsewhere. There is now an opportunity to modernise the orthotist service in Northern Ireland and make it one of the most attractive services to work in for existing orthotists and new graduates alike.

A summary of what a good orthotist model should look like can be found in Appendix 5 and a list of the current challenges is in Appendix 6.

Section 11: Recommendations

The main recommendation from this report is for the Department of health to fully investigate the alternate ways of delivering the service in Northern Ireland. There needs to be a working group established to fully evaluate the alternative options for delivering the service. The group will need to conduct a full and evidenced based options appraisal and benefits analysis taking into consideration the complexity of the current funding streams, the governance inconstancies and the insufficient staffing levels current experienced by the service. The current service model is not fit for purpose resulting in inequalities in accessing services, unacceptable waiting times both to see the orthotist and to receive the product, an under appreciation of the full skill set of the orthotist and an underutilisation of their skill set in structured MDT working. The service suffers greatly from being hidden within Trusts with the service having no identity and historically no voice within Trusts. There is a lack of professional respect for the orthotist service with clinicians being asked to work in inappropriate rooms, sometimes without a desk and sometimes without patient notes.

Service models are structured inappropriately so that finances are driving service delivery as opposed to clinical need. Referral pathways are not standardised with access to services, and in some case the entitlement of devices controlled by clinicians outside of the service. The workforce is stretched beyond capacity with staff routinely seeing extra patients in an attempt to try and manage the caseload.

Regardless of which service delivery model is adopted, no improvements can be made to the service delivery until there are changes to the governance around the service the care pathways and the finances. Until the model is designed around clinical need and resources aligned accordingly it will be impossible to realise any significant improvements to the orthotist service.

Recommendations

Service Model recommendations

There are a number of recommendations made below as a result of the orthotist service review. These recommendations are related to planning, strategic, commissioning, operational and clinical elements of the service.

Recommendation	Rationale	Responsible organisation
There needs to be a working group established to fully evaluate the findings in this paper and explore the alternative options for delivering the service. The Workforce plan for the orthotist service needs to be completed and any recommendations made need to be fully explored in order to address the future demands of the services. There needs to be a piece of work undertaken to accurately calculate the demand for present services, and the required capacity be considered and	The orthotist service is facing a large workforce challenge. Although successful workforce planning can help address the future numbers of orthotists in the system. Work also needs to be done to address the current workforce deficit. A plan for future service delivery of the orthotist service needs to be decided on and the rationale for the decision fully evidenced before a decision can be taken on which model needs to be implemented.	The Workforce plans were commissioned by and are the property of the Department of Health.

commissioned in any future model. All of the options for the future delivery of the orthotist service need to be fully explored with a comprehensive plan developed to address the commissioning and delivery of any future service model.		
A model needs established that enables seamless transition of care from Paediatric to adult services.	Current complex referral pathways can result in children falling out of the service when they reach eighteen. There needs to be a pathway for them to continue to receive the care they require as an adult.	Child to Adult transition needs to be considered as part of any future review
Orthotist services should be considered in the planning of all future Health and care centres built across Northern Ireland.	Appropriate clinical space is required to facilitate current clinics and for the future development of the service. Orthotist services have specific requirements, such as a 10m walkway, which can only be incorporated if planned form an early stage.	Trusts
The orthotics service needs to have open access referral from other services especially AHP services, who generate a	Convoluted referral pathways have led to large delays in patients accessing services, difficulties in following up	Work needs to be undertaken collaboratively between the DoH, HSC Board, HSC Trusts and the Public Health

large volume of the referrals to the current orthotist services. Referral Pathways into the orthotist service and referral pathways between the orthotists and other AHPs need to be streamlined and consistent.	patients, a lack of recorded outcomes and services developing workarounds to ensure patients can be seen.	Agency to ensure that the service is fully funded to ensure that open access services will not adversely impact on the service delivery by stretching an already under resourced service, and not negatively impact on the budgets of services referring to the orthotist.
All of the options for the future delivery of the orthotist service need to be fully explored with a comprehensive plan developed to address the commissioning and delivery of any future service model	A plan for future service delivery of the orthotist service needs to be decided on and the rationale for the decision fully evidenced before a decision can be taken on which model needs to be implemented.	DoH will need to commission a working group to take forward the recommendations in this paper and propose a model for service delivery.
A full financial review is required to determine the future funding of any proposed models. The service model should be driven by Evidenced based clinical pathways and population need as opposed to finance.	Current service models are resulting in an under resourced service delivering care driven by a finance model as opposed to evidenced based Care pathways. It results in costs cross charged to referring sources resulting in patients being needlessly referred to other services for onward referral when a need for the	DoH

	orthotist service has been identified.	
Data definitions for an episode of care need to be agreed and implemented across all Trusts. Clear definitions on each waiting time category are required to help determine exact waiting times at each stage of the journey and for the complete patient episode.	To enable episodes of care to be counted equitably across the region. Current variation in the data definitions and care pathways makes it challenging to accurately capture the current activity or predict future demand for the service.	HSCB and Trusts need to agree data definitions to be implemented consistently across all trusts.
Evidenced based Care pathways need to be developed for the orthotist service. The Care pathways need to specify the competency levels of the orthotists and the resources required to manage the patients effectively. These care pathways can then be matched to population need to evidence the demand for the service.	Current service provision is being driven by finance models linked to the contract. Before any new service model or contract is negotiated or put in place there must be a full understanding of the demand for the service and the number and skill set of the orthotists required to deliver it.	Orthotist leads and AHP leads
Ensure waiting times for orthotist services are monitored and reported as part of the	Current waiting times are not monitored.	PHA and HSCB.

AHP waiting list target.		
There should be an orthotist lead in each HSC Trust, or a regional lead, with accountability for the orthotist service.	A lack of coordination currently evident across the orthotist services has led to a disjointed service with no clear identity and no voice. An orthotist service managerial structure should be responsible for the services for the local population and be involved in the development of managing services regionally. The orthotists require representation at a strategic level in each Trust, and those persons need to be actively involved in the development and implementation of a new service model.	Depending on the service model a suitable person or persons needs identified who will be responsible for the service and drive forward the implementation of a new service model.
There should be a fully funded and fully integrated administration service with dedicated orthotist administration support.	Administration services in most Trusts are not funded and the resource is taken from other services.	SPPG. The administration needs of the service must be fully considered in the development of the model and in any future funding of the service.
A clinical structure needs to be developed to enable advanced level practice and	A structure that enables the orthotists to practice at the top of their license is	DoH and Trusts. The correct service structure needs to be in place but how

specialist clinics that can be accessed by all patients.	essential. A hub and spoke model of core clinics in Trust locations with a regional specialist clinic that can be accessed from the core clinics will have the potential to improve service delivery and patient outcomes	best this is delivered is dependent on the model of service that is chosen.
The creation of orthotic assistant posts and apprenticeship programmes should be considered in the future service model.	There are currently no orthotist assistants in HSCNI, there is potential to provide some additional capacity in multi chair sites by employing orthotist assistants, who can then be considered for apprenticeship programmes to increase orthotist numbers.	DoH
There needs to be a review of the service provision to children with SEN. There needs to be engagement with the SEN schools to help establish the best and most effective way of providing an equitable service to children with SEN across the whole of Northern Ireland.	Current provision to SEN schools is sporadic and not consistent. There needs to be a uniformed approach to services provided in SEN schools that is equitable across the region and across trusts.	Service delivery in SEN schools needs to be considered as part of any future work.
A PPI exercise should be undertaken to	A PPI exercise across all Trusts will	DoH. A PPI exercise should be

gauge the opinion of service users to get a full understanding of the impact the orthotist service has on patients' lives.	enable patients to have their voice and enable them to tell their story about the service they have received, whether it is good or bad.	undertaken as part of any future work.
Work with the encompass team to ensure a specific ICT system is developed for the regional orthotist service specifically designed to capture contacts- capture outcome measures and track patients through the service. Systems are currently available and operational across the UK that have the potential to be adopted in HSCNI. All orthotists should have access to all the systems that they require to deliver patient care.	Provides a standardised system of recording. Creates a system that can be monitored accurately. Improves financial governance. Provides consistent Outcome measures. Provides continuity of care. Enables a paperless system.	Trusts should ensure that the needs of the orthotist service are fully considered in the development of encompass. And that all orthotists have full access to the required systems.

Clinical recommendations

The following recommendations are easily implemented and can have an immediate impact on the delivery of service. Trusts can implement all of these recommendations.

• All Clinic times structured to ensure adequate clinic time per patients as per BAPO guidelines. • Orthotists should be consulted with, and approve any additional patients booked into sessions. • Orthotists should be involved in the triage of all patients referred to their service. • All orthotists should have Trust name badges and access rights to all areas of the Trust buildings that they are required to work in. • The orthotist services require appropriate, dedicated, protected clinical space in which to deliver the service.	There should be no need for any other service to be involved in the triaging of orthotist referrals. Orthotists should be delivering services from rooms that are fit for purpose and properly equipped. Correctly allocated clinical times will help evidence the capacity of the service and enable the orthotists to accurately record outcome measures evidencing the effectiveness of the service.	Trusts

Section 12: References

Associate Parliamentary Limb Loss Group. (2011)Patient Led orthotic Services User Charter.
Available at: www.apllg.eu (Accessed 3 April 2021)

British Association of Prosthetists and Orthotists. (2021) Service provision guidance for prosthetist and orthotist services. Available at: www.bapo.com (accessed 3 April 2021

British Association of Prosthetists and Orthotists.(2015) Measuring Change: An introduction to Clinical outcome measures in Prosthetics and Orthotics. Available at: www.bapo.com (Accessed 3 April 2021).

British Association of Prosthetists and Orthotists.(2018). Standards for best practice. Available at: www.bapo.com (accessed 3 April 2021).

Barr, John. (2021) Trauma and Orthopaedic Network, Foot and Ankle sub group.

Centre for Economics and Business Research Ltd . The economic impact of improved orthotic services provision - A review of some of the financial and economic benefits of a better functioning system for the provision of orthotic services; 2011.

Haggerty JL, Reid RJ, Freeman GK, et al. Continuity of care: a multidisciplinary review. *BMJ.* 2003;**327**(7425):1219–1221. [PMC free article] [PubMed] [Google Scholar]

HCPC. (2020). Effective clinical and peer supervision report. Available at: https://www.hcpcuk.org/globalassets/resources/reports/research/effective-clinical-and-peer-supervision-report.pdf (Accessed July 8th 2021)

Health and Social Care Board Northern Ireland (2018) Regional review of the orthotic service definitions, recording and professional requirements.

Hutton, J., and M. Hurry. "Orthotic Service in the NHS: Improving Service Provision" York Health Economics Consortium, Univ. of York;" 2009.

Levine, D. (2018) When should patients wear post operative orthoses? Podiatry Today. Available at: https://www.hmpgloballearningnetwork.com/site/podiatry/when-should-patients-wear-post-op-orthoses (Accessed Nov 2021)

NHS England. (2015).Improving the quality of orthotics services in England. Available at: orthcs-final-rep.pdf (england.nhs.uk) (Accessed 3 April 2021).

NHS Scotland. (2005) Scottish Orthotic services review. Available at Microsoft Word - DC20050614Orthotics.doc (scot.nhs.uk) (Accessed 3 April 2021).

NHS Orthotic manager Group.(2019) Guidelines to Accessing NHS Orthotic Services and Orthosis Provision Eligibility, Available at: NOMaG-NHS-Orthotic-Services-Eligibility-Guidelines-0519.pdf (bapo.com) (Accessed 3 April 2021)

Orthotic pathfinder-"A patient focused strategy and proven implementation plan to improve and expand access to orthotic care services and transform the Quality of care delivered. (2004) NHS Purchasing and supply agency. Available at: https://www.researchgate.net/publication/230819236_Orthotic_Pathfinder_Report (Accessed 3 April 2021).

World Health Organisation Standards for Prosthetics and Orthotics Part 1: Standards. 2017. Available at: https://apps.who.int/iris/bitstream/handle/10665/259209/9789241512480-part1-eng.pdf?sequence=1&isAllowed=y (Accessed 5-June 2021)

Section 13: APPENDIX

Appendix 1: List of clinical locations from which the Orthotist service is delivered.

Trust	Hospital Location
BHSCT	Royal Belfast Hospital Sick Children
BHSCT	Musgrave Park Hospital
BHSCT	Royal Hospital
BHSCT MPH/MPROS	Belfast City Hospital
BHSCT MPH/MPROS	Musgrave Park Hospital
BHSCT MPH/MPROS	Fleming Fulton School
BHSCT MPH/MPROS	Oakwood School
BHSCT MPH/MPROS	Glenveigh School
BHSCT MPH/MPROS	MHS School
BHSCT MPH/MPROS	Parkview School
BHSCT MPH/MPROS	Torbank School
BHSCT MPH/MPROS	Lurgan Hospital
BHSCT MPH/MPROS	Ballymena Health & Care Complex
BHSCT MPH/MPROS	Downe Hospital
BHSCT MPH/MPROS	Causeway Hospital
BHSCT MPH/MPROS	Whiteabbey
BHSCT MPH/MPROS	Armagh
BHSCT MPH/MPROS	Dungannon
BHSCT MPH/MPROS	Ballymena
BHSCT MPH/MPROS	Lisburn
BHSCT MPH/MPROS	Moyle Hospital
BHSCT MPH/MPROS	Banbridge Poly Clinic
BHSCT MPH/MPROS	Muckamore Abbey Hospital
BHSCT MPH/MPROS	Ards Hospital
BHSCT MPH/MPROS	Mid Ulster Hospital
BHSCT MPH/MPROS	Musgrave
BHSCT MPH/MPROS	Craigavon Area Hospital
BHSCT MPH/MPROS	Daisy Hill Hospital
Dom Visits - various trusts	Dom Visits
ICATS	SGBull & Co Ltd
NHSCT	Ballymena Health & Care Complex
SEHSCT	Ulster Hospital Dundonald
SEHSCT	Downe Hospital

SEHSCT	Lisburn Health Centre
SEHSCT	Crossgar Community Centre
SHSCT	South Tyrone Hospital
SHSCT	Armagh Community Hospital
WHSCT	South West Acute Hospital
WHSCT	Omagh & Primary Care Complex
WHSCT	Roe Valley
WHSCT	Altnagelvin Area Hospital
Workshop Clinic - various trusts	SGBull & Co Ltd
Northern trust	Ballymena HCC
	43

Appendix 2: Stakeholder engagement list

Stakeholders		Stakeholders
Northern Trust		Trust informatics teams
Western Trust		Prosthetists
South Eastern Trust		Service managers
Southern Trust		Admin services
Belfast Trust		Clinical lead Orthotists
BAPO		Podiatrists
Orthotists		Physiotherapists
Orthotics service managers		Occupational Therapists
Orthopaedic consultants		AHP Leads
General Practitioners		Trust Directors
Admin managers		Learning disability team
Neuro specialist Physios		Trauma and Ortho Physiotherapists
Rheumatology Podiatrists		MSK Specialist Podiatrists
Diabetes Specialist Podiatrists		SEN Physiotherapy
Paediatric Physiotherapists		PHA

Appendix 3: Case Studies

Case study

Joe is a 30-month-old child with a diagnosis of unilateral CP. He began standing in July 2020, although his affected foot could be manipulated back to a foot flat position, he would weight bear and walk on tip toes with lower limb internal rotation. On assessment it was discovered that his condition was progressing his range of motion was decreasing and he was unable to achieve foot flat on his left side. He was referred to the Neuro disability consultant by the Paediatric Physiotherapist in November 2020 and received an appointment in May 2021, The Neuro disability consultant then referred on to the Orthopaedic team for the urgent provision of a lower limb splint. The child then had to wait on their Orthopaedic assessment following which they were referred to the orthotist. A direct access referral from the Physiotherapist to the Trust orthotist would have avoided the need for this overly complex pathway and unnecessary patient waits.

Case Study

Adam is a severely disabled child; he requires a Spinal brace and Pedro shoes. He was referred to MPH for his spinal brace. In MPH he sees a specialist clinician with advanced level skills in providing spinal braces. Adams Physiotherapist needed to refer him for Piedro shoes. The Physio had to refer to the core service in Adams home Trust. As The Piedros were not ordered through his consultant they cannot be provided or fitted by the orthotist in MPH. This results in Adam seeing two different elements of the same service in two different locations. Given the complexity of Adams condition it would be easier both for Adam, the orthotist and Adams parents if the whole service was provided in one location but instead, they have to transport him to different locations at different times. In some cases, the appointments for the different devices have been just a few days apart causing great frustration for everyone concerned.

Case Study

John and his adult son both have the same degenerative neurological condition that requires the provision of an AFO to aid walking. In February 2020, Pre COVID, John was referred by his GP to the orthotic service in his local Trust for the provision of a device. His son, Paul, was referred by his neurologist to the regional service in MPH. John was seen shortly after he was referred and provided with an AFO which significantly improved his Gait and quality of life. Paul was not able to be seen due to the restrictions on services as a result of COVID. As John has the same size feet as his son, he let his son try on his device and he too had a significant improvement in his Gait.

Despite being advised that the device issued to John was solely for his use he has advised that he is sharing his device with his son, enabling Paul to have a significant improvement in his Gait and quality of life while awaiting an appointment for Paul to be seen.

Case Study

Sarah is a 34-month-old child with Spastic Diplegia, she is mobilising with a K walker which is promoting independence, but her gait pattern remains poor. She is able to attain foot flat but despite intensive stretching exercises undertaken by her family her ROM is decreasing. The Paediatric Physiotherapist identified the need for a bespoke AFO. The Physio referred via the consultant Paediatrician to the Neurology and Orthopaedic service in May 2020. The child was seen by the neurology service in July 2021 and was still waiting on an Orthopaedic assessment. Concerns over the length of wait for the child were escalated through the Trust in July 2021 and subsequently the patient was offered an appointment to be assessed by the orthotist as part of the Trust contract before the end of July 2021. This bypassed the correct referral process into the Trust, but without timely intervention the patient's condition would have deteriorated.

Appendix 4: Standards for the working environment for the Orthotist

5.1 Statement

The British Association of Prosthetists and Orthotists supports the view that a physical environment suitable and appropriate to the needs of the service user and the Prosthetist/Orthotist is an integral part of effective treatment

5.2 Introduction

The following information is intended to be useful to any organisation wishing to establish a new orthotic or prosthetic service, up-grade an existing service or audit their existing buildings and facilities. The standards should be regarded as minimum requirements

The safety, ease of access, privacy and dignity of the service user will be the main criteria in the maintenance of a suitable environment for prosthetic/orthotic practice

The prosthetic/orthotic clinic should have adequate space, facilities and equipment to support and encourage best clinical practice

The following information provides specific additions for the specialist prosthetic/orthotic environment

5.3 The Working Environment

The chief function of an prosthetic/orthotic clinic is to provide a safe environment for the service user and practitioner to provide specialist consultation, examination and treatment

Service users with high levels of disability and severe mobility problems are seen routinely in the work environment, therefor all user and practitioner facilities must take this into account

5.3.1 All service user areas must be suitable for purpose: reception, waiting, consultation, examination and treatment

5.3.2 Plaster casting and/or shape capture and measurement facilities must be available for the practitioner

5.3.3 A suitable service user walkway must be available for the practitioner. Gait assessment, whether observational or instrumental, is critical to the process of prosthetic/orthotic practice from assessment to the final dynamic check out of devices

5.3.4 A suitably-equipped, positive plaster cast rectification area must be available for practitioner use. Those using digital scans for shape capture must have access to relevant hardware and software to allow for modification of such scans.

5.3.5 Device adjustment facilities must be available and on-site fabrication facilities are preferable

5.3.6 Adequate storage, infection control and decontamination facilities are particularly important for safe practice

5.3.7 Where prosthetic and orthotic outreach services are conducted, efforts should be made to provide all of the above facilities

Appendix 5: What does good look like?

As a part of the review, I asked all of the stakeholders involved in the process to let me know what a good orthotist service would look like to them. The list below is the responses received. None of the comments were surprising and all of them are achievable with a properly resourced model and the correct leadership.

- Easy simple access for patients and referrers.
- Direct Access for AHPs/ GPs.
- Clear pathways.
- Simple for patients to re-access services when needed.
- Appropriate clinical times for the patients and clinicians.
- Maximum waiting times which are monitored.
- Continuity of care with the same orthotist seeing the patients through their journey.
- Outcome measures recorded.
- Service based on quality and outcomes not number of devices prescribed, clear KPIs.
- Enough sessions available to see all of the patients.
- Traceability of orders and stock through the system.
- Access to MDT working consultants/physios/ orthotists/podiatrists.
- Appropriately resourced workforce to meet demand.
- Advanced specialist clinicians available to support complex cases.
- Post assessment communication of outcomes and treatment plans.
- Smooth transition from Paediatrics to adults.
- PPI, Patients involvement in service planning.
- Right clinician first time.
- One electronic patient record across services.
- Smooth transition/ handover between Trusts.
- Clear lines of communication between all parts of the service.
- Continuity of care.
- All patients triaged and Risk stratified by orthotists to enable patients to be appropriately allocated appointments.

Appendix 6: Issues in the current service

Lack of continuity of care
Lack of sufficient staffing and concerns about future workforce challenges
No clinical structure in place and a lack of specialist and advanced level practice
Lack of Outcome measures, caused in part but insufficient capacity review appointments
Issues with accommodation including lack of appropriate rooms, lack of equipment and access privileges.
Not every service has a dedicated funded Admin service
Lack of ICT access resulting in some orthotists being unable to capture their own clinical data
Lack of representation at a strategic level
Clinical Model driven by financial contract
Lack of Care pathways
Lack of appropriate agreed data definitions
Lack of access to essential ICT systems
Lack of a standardised ICT system
Services in trusts not subject to rigorous audit programme.
KPI measures are quantitative, and based around return times as opposed to qualitative
Complex referral pathways
Workarounds in place to Work around an Overly complex system
Lack of episodic care
Lack of Peer support for orthotists working in Satellite clinics
Orthotists not involved in triaging their own referrals
Need to increase MDT working
Prescriptive referrals
No clear pathway for transition from Child to adult service
No PPI undertaken
Lack of consistency in service delivery between trusts
Challenges with delivery of service to SEN children

Appendix 7 : Definition of terms

Orthosis/ Orthotic

An *orthosis/orthotic* is an external device used to apply force or modify forces acting upon the human body in order to improve mobility, aid function, provide support, correct malalignment, protect, facilitate healing or reduce pain/discomfort. This is a broad term and includes devices such as: splints for the upper and lower limb, functional insoles, specialist footwear, spinal braces, neck collars, abdominal supports, conventional callipers, trusses, compression hosiery and protective helmets. The clinical skillset for providing orthotic treatment is the role of a group of HCPC registered clinicians known as *orthotists*. (BAPO 2021)

Orthotist

Orthotists are defined as clinicians who assess gait and movement in order to provide engineering solutions to patients with deficits of the neuro, muscular and skeletal systems. They are extensively trained at undergraduate level in mechanics, biomechanics, and material science along with anatomy, physiology and pathophysiology. Their qualifications make them competent to design and prescribe orthoses that modify the structural or functional characteristics of the patients' neuro-muscular and skeletal systems enabling patients to mobilise safely, eliminate gait deviations, reduce falls, reduce pain, prevent and enable healing of ulcers. They are also qualified to modify CE marked orthoses or componentry, taking responsibility for the impact of any changes. Orthotists treat patients with a wide range of conditions including diabetes, arthritis, cerebral palsy, stroke, spina bifida, scoliosis, musculoskeletal concerns, sports injuries and trauma. (BAPO 2021)

Orthotist Assistant

The orthotist assistant is a nonprofessional clinic-based role. The orthotist assistant works under the delegated responsibility of the orthotist and assists in the general running of the clinic and the treatment of patients.

Orthotist Technicians

Employed by the manufacturing companies the technicians work in the manufacturing suites and orthotic labs manufacturing the devices prescribed by the orthotists. On complex cases the orthotist technicians may work jointly with the orthotist and the patient to ensure that they are manufacturing the device to fully meet the patient's needs.

Orthotic Services

Orthotic services are specialist services providing stock , modular and bespoke orthotic devices to a wide-ranging group of patients in order to support and improve posture, maximise function and mobility ,reduce pain and correct deformity. The orthotic service in Northern Ireland is mainly provided by orthotists, with some orthotic provision being undertaken by other AHPs including Podiatrists, Physiotherapists and Occupational Therapists (OT's).

AFO

Ankle Foot Orthoses. A type of orthotic device that is used to aid function and control in the lower limb, The device is worn on the lower limb and works across the ankle joint and the rear foot.

KAFO

Knee Ankle Foot Orthoses. A type of Orthoses worn on the lower limb that is used to aid function and control across the Knee, ankle and rear foot.

Appendix 8: Comparison of different models.

	Contracted model	In house model	Hybrid model
Model	Contracted models are where external companies are procured to provide the clinical service in the Trust.	In house service The Trusts are directly responsible for and provide the clinical service.	A Combination of Contracted and in house
Orthotists	Orthotists are directly employed by the contracted service. The number of orthotists provided is dependent on the requirements of the contract. Contracted companies have to cover sick leave and maternity leave. Contracted companies pay the salary and all other costs associated with the orthotist. Contracted companies provide all training to the orthotists	Orthotists are employed directly by the trust. The number of orthotists employed is dependent on the demands of the service and the population need. Orthotists can be employed across a range of bandings and clinical specialties. Maternity and sick leave is absorbed by the trust. The trust provides all training.	A combination approach can be adopted. Orthotists can be employed by the trust or by the Contracted company.
Orthotist assistants	Employed by the contracted company and provided to the service as per the needs of the contract	Employed by the trust and recruited to meet the identified demand	A combination, the orthotist assistants can be employed by the trust or the contracted supplier
Orthotist technicians	Employed by the Contracted company to work within their manufacturing suite	There is potential to employ a small number of technicians to make minor adjustments to devices but there will be no	There is potential to employ a small number of technicians to make minor adjustments to devices but there will be no

		scope to recruit the full number of technicians required to manufacture all of the product ordered	scope to recruit the full number of technicians required to manufacture all of the product ordered
Manufacturing facilities	Contracted companies have their own manufacturing facilities	There is potential to have a small lab to modify devices and make alterations, but a full Manufacturing facility is required in order to manufacture the full range of devices ordered	There is potential to have a small lab to modify devices and make alterations, but a full Manufacturing facility is required in order to manufacture the full range of devices ordered
Admin	Admin staff can be provided by Contracted company if specified in contract.	Admin staff can be employed specifically to meet the needs of the contract or Admin staff already employed in HSC can be asked to take on the additional responsibilities of the orthotist service	A combination can be taken depending on the contract put in place and the availability of admin resources in trust.
Service management	Can be provided by the contracted company if contracted for a complete service model. Contracted companies may not be able to provide the same level of strategic direction and influence as trust employed staff.	Service managers will need to be recruited or the management of the orthotist service will need to be added to existing roles. Trust employed service leads will be able to provide greater levels of influence in trusts and regionally and provide more strategic direction	A Hybrid model can recruit orthotists to act as service managers within the trusts at the same time as having the orthotists employed by the contracted company. This will result in the service lead being able influence in trusts and regionally and maintain responsibility for the contracted companies service delivery.
ICT	Some contracted companies have their own ICT systems, these are not necessarily	Trust ICT systems need developed to ensure a suitable ICT system is in	In a hybrid model the trust can choose which ICT system best suits the delivery of service.

	compatible with or transferable to trust systems	place to meet the needs of the service. Systems will need developed in conjunction with Encompass	
Clinical Facilities	Some contracted companies can provide a limited number of clinical facilities, but the majority of clinics will be delivered in trust premises	The trust will provide clinical rooms across a range of locations	The trust will provide clinics across a range of locations and can also make use of the contracted companies clinical space if suitable and appropriate.